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THE

SOUTHERN PLANTER,

A MONTHLY PERIODICAL,

DEVOTED TO

AGRICULTURE, HORTICULTURE AND THE HOUSEHOLD ARTS.

VOLUME III.
CHARLES T. BOTTS, EDITOR.

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INDEX.

A.

Address—Review of Dr. Wight's, p. 53. Of Mr. A. C. Morton's, p. 200.
Agriculture—Its extent and importance in England, p. 123. The estimation in which it is held in Virginia, p. 124. Nature of the science of agriculture, p. 227.
Agricultural Schools—Necessity for, p. 14.
Animal Manure—Experiments with decomposed animal matter, p. 11.
Ants—To get rid of black or red ants, p. 18.
Aphorisms—p. 137, 188, 216, 235, 278.
Apricots—To secure the fruit, p. 61.
Artichokes—Experiments in raising Jerusalem artichokes, p. 10. Directions for cultivating, p. 73.
Asparagus—New method of growing, p. 77. Should be watered with brine, p. 41.

B.

Bees—To choose a swarm, p. 216. How to manage them, p. 256.
Beehives—Proper construction of, p. 225.
Birds—Advantageous to farms and gardens, p. 183.
Bleeding—To stop, p. 120. At the nose, p. 168.
Blue Marl—Experiments with, p. 9.
Blue Grass—The Kentucky blue grass recommended, with directions for its cultivation, p. 74, 123, 153.
Boiler—Bentley's steam generator, with a cut, p. 148.
Bommer's Manure—The author's account of it, p. 113. Opinions of others, p. 115, 142, 165, 189, 213, 277.
Breeding—Rules to be observed in breeding animals, p. 121.
Broom Corn—recommended for hay, p. 69, 127.
Buckwheat—Mode of cultivating, p. 110, 142.
Butter—Its manufacture and preservation, p. 131, 178. The Richmond market badly supplied, p. 177.
Buildings—A plan for farm buildings, p. 251.

C.

Capital—Proper disposition of farming capital, p. 222.
Carpets—Should be frequently shaken, p. 187.
Cattle—Directions for stall feeding, p. 18. Simple method of managing unruly cattle, p. 39. The points of a good animal illustrated, with an engraving, p. 179.
Cabbage—To free from lice, p. 104. To cause them to head during winter, p. 9. Good manure for, p. 232.
Carrots—The white Belgian recommended by Mr. Bement, with directions for their cultivation, p. 4, 72.
Carving—To facilitate carving on wood, p. 119.
Chickens—Directions for raising, p. 184, 249. See Gapes.
Choking—Remedy for, p. 239.
Churns—Description of one, with a cut, p. 281.
Charcoal—Result of experiments with, p. 50, 252, 266. Directions for burning, p. 74, 80. Recommended for curing tobacco, p. 230. Should not be relied on for the manure heap, p. 274.
Chinches—To get rid of, p. 18.
Clubs—Value of agricultural clubs, p. 117.
Clay Lands—How to manage, p. 26.
Climate—Mr. Locke's theory, p. 39. Supposed effects of a northern climate, p. 265.
Clearing Land—How it should be conducted, p. 278.
Clover—A box for sowing, with a cut, p. 60. Objected to, p. 93. Best mode of curing clover hay, p. 194.
Cooking—Apparatus for cooking food for stock, with a cut, p. 211.
Communications—The Editor's estimate of original communications, p. 186.
Covering—Benefit of protecting the soil by a cover, p. 239, 243.
Coulter—A winged coulter recommended, with a cut, p. 55. A jumping coulter described, with a cut, p. 139.
Colic—In horses, nature of and remedy for, p. 47, 113.
Corn—Proper distance for planting, p. 56. Double eared recommended for seed, p. 75. Suckering objected to, p. 77. Should be soaked in copperas-water before planting, p. 79. A mixture to put in the hill, p. 95. Mr. Woodson's mode of cultivation, p. 99. Commented on, p. 157. Proper time for planting, p. 10, 57. Soaking for food recommended, p. 19. Sown broadcast for hay, p. 32, 276. Should not be permitted to ear, 77. Broom corn recommended for hay, p. 69. The Roanoke mode of cultivation, p. 209. Mr. Young's mode of cultivation, p. 34. Commented on, p. 66. Mr. Shriver's mode of cultivation, with a drawing and description of the implement with which he made his crop of eighty-five bushels to the acre, p. 36. Reviewed, p. 66. *Firing* prevented by the use of ashes, p. 41. Also by deep tillage, p. 272. Great yield in Henrico, p. 282. Attention should be paid to saving seeds, p. 228. Experiments with plaster, p. 170. Best mode of cultivating corn, p. 198.
Corn and Cob Crusher—Hussey's described, with a cut, p. 44.
Corns—To eradicate, p. 23, 255.
Coughing—To stop, p. 96.
Consumption—An invention to cure, p. 63.
Coal Tar—Recommended for roofs, p. 76. Denounced, p. 146.
Coal Ashes—Experiments with, p. 198.
Cream—A substitute for, p. 135. Directions for making clouted cream, p. 243.
Crab Grass—Its value as a hay crop, p. 222.
Cultivator—Wood's patent described, with a cut, p. 29.
Cucumber—To obtain early, p. 78.
Cultivation—Rows of all plants should run north and south, p. 65.
Culture—Its effect upon vegetables, p. 134.

D.

Ditching—Mr. Watkins' mode of ditching, p. 83. See Draining, below.
Dogs—To cure the distemper, p. 31.
Draining—Covered drains recommended, with an estimate of their cost, p. 161, 262.
Drought—Effects of prevented by deep tillage, p. 272. Also by the use of ashes, p. 41.
Dyeing—Recipes for dyeing, p. 138.
Dynamometer—Description of one, with a cut, p. 21. Another, p. 85. Another, p. 259.

WITHDRAWN

E.

Early—A compost liquid to hasten the growth of vegetables, p. 251.
Economy of Farming—A new work, p. 208.
Eggs—To secure a plentiful supply during the winter, p. 13. To make hens lay, p. 46, 56. To distinguish male from female eggs, p. 51. To preserve eggs, p. 178. Recommended as an antidote for corrosive sublimate, p. 239. Relieve choking, p. 239.
Encyclopedia—Johnson's Farmer's Encyclopedia recommended, p. 160.

F.

Farming—A pattern farm deserbed, p. 27.
Fall Ploughing—Objected to, p. 79. Recommended, p. 252.
Fence—Directions for making a neat and economical enclosure, with a cut, p. 6. A new mode of fencing, p. 85. A machine for making post and rail fence described, with a cut, p. 125. Mr. Miller's plan, p. 156. A neat enclosure for a yard described, with a cut, p. 174.
Fire Wood—Should be seasoned, p. 39, 187.
Fish—Fish ponds recommended to the farmer, p. 207.
Flowers—To preserve them fresh, p. 95. Management of, p. 196.
Fodder—Often pulled too early, p. 278.
Food—Nutritive properties of different kinds, p. 133.
Founder—The value of a recipe for, confirmed, p, 42. A cure for, p. 96.
Fork—A plough-fork for cultivating corn described, with a cut, p. 36.
Fowls—Directions for managing during the winter, p. 13. How to fatten, p. 17. To prevent their ravages, p. 195.
Fruit—The adaptation of the southern climate and soil to the growth of fruit, p. 22, 268. Method of preventing injury from spring frosts, p. 38. Another, p. 40. New plan of making fruit trees, p. 215.
Friction—Reduced by the use of Babbitt's anti-attrition metal, p. 60.

G.

Galls and Gullies—To remedy, p. 279.
Gapes—In chickens, to cure, p. 186, 198, 221.
Gate—Mr. Rice's plan, with a cut, p. 84. Mr. Wrenn's plan, p. 132. Another, p. 197.
Gardens—Too much neglected by the farmer, p. 59.
Glass—Recommended as a manure for wheat, p. 10.
Gourds—A wonderful yield, p. 262.
Grapes—Value of Norton's seedling, p. 262.
Green Crops—Value of as manure, p. 231, 242.
Grease—To remove from clothes, p. 186.
Grass—New method of seeding meadows, p. 9.—Herdsgrass preferred to clover, p. 129.
Grubbing—A hook for, described, with a cut, p. 78. Another implement, p. 275.
Grubs—To cure, p. 113.
Guano—Its character and properties, p. 196.

H.

Hay—To cure, p. 162. Value of crab grass as a hay crop, p. 222.
Hard Times—Good effects of, on agriculture, p. 59.
Herdsgrass—Preferred to clover, p. 129.
Hessian Fly—Mr. McKinney's notion, p. 176. Commented on, p. 212.
Health—To preserve, p. 136.
Henrico Agricultural Society—Their fifth meeting, p. 153. Sixth do. p. 267.
Hinge—Description of a cheap and durable one, with a cut, p. 155.
Hill Sides—Description of an implement for laying off corn rows on hill sides, p. 18.
Horses—To cure inflamed eyes, p. 122. Proper mode of feeding, p. 185, 238. To purge, p. 242. To cure the hooks, p. 257.
Horse Shoes—Improvement in, p. 58.
Horsepower—Some excellent suggestions concerning, p. 30. Hall's patent described with a cut, p. 224.
Hogs—Proper management of hogs that run out, p. 42. General directions for managing, p. 61, 250. A description of the Sand Hill hog, illustrated with a cut, p. 220, 257.
Home Industry—The best protection for home manufactures, p. 52.
Hooks—Nature of and remedy for the disease, p. 257.

I.

Ink—To make indelible ink, p. 40.
Industry—Anecdote illustrating the effects of industry, p. 230.
Improvement—Dr. Morton's method of improving exhausted land, p. 146. Another, p. 149, 216.
Ivory—To restore its whiteness when discolored by age, p. 187.
Ivy—To extirpate, p. 77

L.

Lamp—A lard lamp recommended and described, with a cut, p. 244.
Lettuce—To have early, p. 79.
Leveller—Description of an implement for levelling ploughed land, p. 166.
Lice—To remove lice from cattle, p. 75. See Cabbages.
Lime—Its effect upon vegetables, p. 79. Its effect upon sorrel, p. 98, 198. Combined with salt and ashes for manuring, p. 217. When and how lime should be used, p. 151. To remove lime spots from woollen clothes, p. 186.
Locust—The value of the locust tree with directions for its cultivation, p. 80.
Looking Glass—The farmer's, p. 225.

M.

Machinery—Difficulty of making machinery for our farmers, p. 205.
Manure—Proper mode of applying, p. 70. Experiments with decomposed animal matter, p. 11. Mr. Jones' mode of managing stable manure, p. 107. Directions for managing the dung heap, p. 118. Use of manure dispensed with, p. 136. A synopsis of Mr. Gaylord's essay on manures, p. 150. An excellent arrangement for saving manure, p. 271. See Bommer.
Marl—An apparatus for testing described, with a cut, p. 203.
Meadows—A new mode of renovating, p. 9.
Mecklenburg Club—Report from, p. 171. Commented on, p. 172.
Milk—Cellars recommended for dairies, p. 229. Proper form for milch cows, p. 231.
Mirrors—To clean, p. 155.
Molasses—Made from apples, p. 119. Recommended as food for horses and hogs, p. 120.
Mud—The value of river mud as manure, p. 6, 19, 215. Proper mode of treating mud for manure, p. 151.

O.

Old Fields—The proper mode of treating piny old fields, p. 84.
Orchards—Too much neglected in the South, p. 268.
Overseers—The effect they produce upon the agriculture of the South, p. 271. Their wages, p. 234, 276.
Oxen—Effects of training, p. 257.

P.

Paint—Recipe for an economical paint, p. 57. Another, p. 104.

Pasturage—Virginia farmers should till less and pasture more, p. 97.
Peach Trees—Novel mode of managing, p. 269.
Peas—Should be cultivated with corn, p. 79. How they should be cultivated for the purpose of improvement, p. 272.
Pines—How to convert old field pines into lasting posts, p. 57.
Plaster—Experiments with, in Prince George, p. 9. Directions for using, p. 156. Experiments with, p. 170. Valuable in the manure heap, p. 274.
Ploughing—To avoid a headland, p. 103, 136. Fall ploughing objected to, p. 219.
Ploughs—M'Cormick's hill side plough described, with a cut, p. 163. Barnaby & Moer's recommended, p. 164. The use of a guage wheel recommended, p. 273.
Poll Evil—Remedy for, p. 11, 119.
Potatoes—New variety, p. 11. Directions for cultivating, p. 35. Different effects of planting different parts of the potato, p. 58. To raise early potatoes, p. 77. History of the potato, p. 206. Result of an experiment in cutting off the flowers and buttons, p. 171. A large yield, p. 268.
Poudrette—Mr. Woodfin's mode of manufacturing, p. 65. Certificates of its value, p. 11, 242. Wholly inefficacious, p. 245.
Posts—Directions for setting them in the ground, p. 61. An implement for making post holes, p. 239.
Poultry—Worthy of more attention, p. 124.
Pot-Liquor—Its uses, p. 232.
Premiums—Suggestions as to the proper manner of awarding them at agricultural exhibitions, p. 128.
Puddings—To make one of light bread, p. 237.
Pumpkins—New mode of cultivating, p. 17.

R.

Raspberry—Directions for its culture, p. 198.
Razors—How to sharpen, p. 255.
Reaping Machine—M'Cormick's described, with a cut, p. 12, 45. Hussey's, do. p. 68. The two compared, p. 183.
Rotation—A system recommended, p. 147.
Roller—Description of one, p. 56.
Roots—The value of, p. 4, 65. Advantages of substituting roots for a part of the corn crop, p. 145.
Ruta Baga—Mr. Bement's mode of cultivating, p. 37. Another, p. 56.
Rust—Recommended to cut wheat at once when it is attacked with rust, p. 79. Wheat prevented from rusting by the use of ashes, p. 169. To preserve tools from rusting, p. 147.
Run-Round—To cure, p. 202.

S.

Salt—Its effect upon worms, p. 134. Used to arrest the exhalation of ammonia, p. 134. Combined with lime as manure, p. 217. Its properties as a fertilizer, with directions for its application, p. 151. Should at all times be accessible to animals, p. 274.
Sassafras—To extirpate, p. 147.
Sausages—Recipe for making Oxford sausages, p. 28.
Scours—In calves, to cure, p. 40.
Seeds—The value of grain for seed dependent upon the soil on which it grows, p. 33. Directions for selecting, p. 247. The depths at which they should be planted, p. 258. Varieties may be improved by proper attention to breeding the plants, p. 266.
Servants—Proper system of management, p. 175.
Sheep—To cure the foot-rot, p. 33.
Silk—Prospects of the silk business in America, p. 112.
Single-Tree—Proper construction of, p. 187. Criticised, p. 212.
Sorrel—How affected by the use of lime, p. 98, 198.
Soapstone—Its qualities as a covering for roofs, p. 108.
Soot—Its value as a manure, p. 133.
Soapsuds—Their value as a fertilizer, p. 190, 195. How they should be used, p. 232.
Soiling—Its advantages, p. 159.
Soap—Directions for making, p. 178. New mode, p. 240.
Soils—An apparatus for testing their texture, p. 233.
Sponges—To soften, p. 154.
Stall-Feeding—Directions for stall-feeding cattle, p. 18.
Stays—Mr. McPherson's opinion of the practice of lacing, p. 37.
Straw Cutters—The value of cutting feed, p. 46. A new cutter described, p. 92. C. T. Botts' recommended, p. 93.
Steel—Directions for working cast steel, p. 54.
Stones—Should not be entirely removed from land, p. 137.
Sturgeon—To pickle, p. 141.
Stables—Proper management of, p. 32.
Sugar—From cornstalks, directions for making, p. 50.
Suckers—Should not be pulled from the corn, p. 77.
Sweet Potatoes—Vines should not be covered up, p. 80. Recommended as food for stock, p. 95, 195. Mr. Gordon's mode of cultivating, p. 137. Directions for keeping, p. 152.

T.

Tables—Showing the number of hills in an acre at certain distances, p. 85.
Teats—Remedy for sore teats, p. 238.
Timber—Proper time for cutting, p. 57, 90, 98, 188. Essay on timber, p. 89. Machine for felling, p. 101. A composition for preserving timber, p. 117.
Threshing Machine—Exall's, with a cut, p. 116.
Tobacco—Mr. Minor's essay upon the management of tobacco from the plant bed to the prize, p. 1. Continued, p. 25, 29. Commented on, p. 63, 87, 109. Tobacco, an improver, p. 95. Denied, p. 111. Comparative merits of different kinds of tobacco, p. 102. To prevent rot, p. 104. To save from the cut worm, p. 104. A prize for tobacco described, with a cut, p. 108. Comments on Mr. Venable's communication, p. 126-7. Charcoal recommended for curing tobacco, p. 230. How to cure, p. 263. Compared with corn, p. 280.
Tomato—How to cultivate, p. 62. To procure early, p. 77. Recommended as food for cows, p. 94, 173.
Tools—Directions for the management of edge tools, p. 81. To temper edge tools, p. 248.
Turnips—Remedy for the turnip fly, p. 167.

U.

Urine—Fertilizing properties of, p. 35.

V.

Vegetables—How to have them early, p. 252.
Virginia—The present state of agriculture in Virginia, p. 7. Inducements offered by Virginia to emigration from the Northern States, p. 66, 262.

W.

Water—To obtain artificial springs, p. 11.
Wax—To prepare beeswax, p. 43.
Weather—A table of prognostications, p. 202.
Wheat—Specimens received from the Patent Office, p. 63. Glass recommended as a manure for wheat, p. 10. Proper time for cutting, p. 76. Result of an experiment in drilling, p. 79. Improved by harrowing in the spring, p. 79. Result of an experiment in early cutting to save from rust, p. 79. Mediterranean wheat, its claims, p. 214, 253, 259. The Red May recommended, p. 214, 236, 238. Proper quantity of seed to the acre, p. 215, 241.
Whitewash—A recipe for making, p. 104.
Worms—In children, to remove, p. 138.
Wood—To prevent its decay, p. 199, 117.
Worsted Work—To clean, p. 263.
Wrinkles—Cause of their appearance on the horns of cattle, p. 111.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. III. RICHMOND, JANUARY, 1843. No. 1.

TOBACCO.

Any thing upon the cultivation of this important plant is of more or less interest to a large portion of our readers; we are, therefore, much obliged to Mr. Garnett for the pamphlet referred to in the following note. It attracted great attention at the time it was written, is nearly out of print, and is worthy of republication. A great deal of it is useless to the old planter, but is not the less valuable to those who are commencing the growth of "the weed." We shall publish the whole in parts, and shall complete it in two or three numbers. We are very desirous that our pages should afford full, complete and correct directions for the cultivation of tobacco, in all its phases; we will, therefore, be obliged to any of our planters who will review and correct Mr. Minor's work.

November 2, 1842.

To the Editors of the Southern Planter:

Gentlemen,—In looking over some old papers the other day, I found a small pamphlet prepared for the press in 1822, by Peter Minor, Esq. of Albemarle, in this State. It is "on the cultivation and management of tobacco from the plant bed to the prize;" and I now send it to you in the belief that you will like to republish it in your paper, as it contains many excellent recommendations on the subject. Not that I am, or ever was an advocate for the culture of this plant, which I have always considered a great destroyer of land, of timber, and of human constitutions; although I do not think quite as badly of it as King James of Scotland, and old Burton, the celebrated author of the Anatomy of Melancholy.* But since there is no probability that its cultivation in Virginia will ever be discontinued, it is desirable that every thing in regard to it should be made known as generally as possible.

I remain, gentlemen,

Your obedient servant,

JAMES M. GARNETT.

* As this queer old writer has some odd notions about tobacco, which are quite as oddly expressed, I here give them to you in his own old-fashioned spelling:—"Tobacco, divine, rare, superexcellent tobacco, which goes farre beyond all their panaceas, potable gold and philosopher's stones,—a soveraigne remedy to all diseases. A good vomit, I confesse, a vertuous hearbe, if it be well qualified, opportunely taken, and medicinally vsed, but as it is commonly abused by most men, which take it as tinkers do ale, 'tis a plague, a mischiefe, a violent purger of goods,—lands,—health;—hellish, develish, damned tobacco, the ruine and overthrow of body and soule."

NOTES

On the Cultivation and Management of Tobacco from the Plant Bed to the Prize—according to the most approved practices in Albemarle and the adjacent counties in Virginia.

1st. OF THE CHOICE OF LAND FOR THE PLANT BEDS AND MODE OF PREPARING IT.

A rich virgin loam with a slight mixture of sand is ascertained to be the best soil for raising tobacco plants. Such spots are indicated by the growth of alder and hazle bushes in bottoms and on the margin of small streams, and if the situation has the command of water for irrigation it is on that account to be preferred—the spot being selected, the first operation is to burn it with a strong fire. For this purpose the growth of every kind is cut off, (not grubbed up,) and the whole surface raked very clean. The burning should be done before Christmas, or as soon after as the weather will permit—and if done thus early it cannot be well too heavy, even bringing the soil to a hard cake. The wonderful fertility imparted to soil by fire, has of late years been clearly proved and developed by various experiments in this and other countries, but judging from long established practice, we suppose it is a fact that has been long known to tobacco planters—that this fertility is imparted by the fire, and no ways dependant upon the ashes left by the process is clearly proved from the fact, that the same results will ensue if the ashes are swept off entirely clean. Or take another piece of ground of equal quality, cover it with as much or more ashes, and prepare it in every respect similar, except burning, and plants cannot be raised in it. Hence the necessity and propriety of regular and uniform burning, the want of which is always manifested by a diminutive yellow and sickly growth of plants in those spots not sufficiently acted on by the fire.

After the ground becomes cool from burning, the whole surface should be swept with a coarse

twig broom to take out the coals. In this operation some of the ashes will be removed, but that is of no consequence—it should then be broken up about two inches deep with grubbing hoes, in which operation, and in repeated choppings afterwards with hilling hoes, all roots will be cut and finally got out with a fine iron tooth rake which will leave the ground in proper order to receive the seed.

The most approved time for sowing is about the first of February, the beds previously being suffered to lie and mellow by the frost and snows to that time. But it will do very well to burn and sow after that time, as late as the first of March, taking care not to have the heat so great. The quantity of seed is as much as can be taken up in a common table spoon* for one hundred square yards, and in that proportion. This quantity of seed should be mixed with about one gallon of clean ashes, and half that quantity of plaster of paris, and the whole well incorporated, and then strewed uniformly over the bed at two operations, crossing at right angles to ensure regularity. Cabbage seed for early planting, tomato, celery, and lettuce seed may be sowed in small quantities with the tobacco seed, without material injury to the growth of the plants. After sowing the seed the ground is immediately trodden over closely with the feet, and covered thick with naked brush. If the frost is severe from this time it is common to take off the brush some time in the month of March, before the plants appear, and tread the bed again, and at the same time give the ground a slight dressing of manure. The dung of fowls of all sorts, is sought after for this purpose, which being beaten, is sifted over the bed through a coarse basket or riddle. The brush is then restored, and not finally removed until the leaves of the plants are about an inch in diameter; when the dressing of manure is again applied, taking care to wait the approach of rain for that purpose. Any grass or weeds that may have sprung up in the mean time are carefully picked out. In dry seasons, if the situation admits of it, the bed must be irrigated by training a small stream of water around the edge of it. If not, it should be watered every evening with a common watering pot, or pine bushes dipped in water and shook over the bed until sufficient moisture is obtained.

Under a careful observance of this management, the plants according as the seasons have been favorable or not, will be fit to transplant from the 15th of May to the 10th of June. A planter thinks himself lucky if he can get his crop pitched by the 10th of June. After that, the seasons are uncertain from the heat of the weather, and the chances of success for a crop are precarious; though it has been known to succeed when planted the middle of July.

* This quantity of plant bed is generally considered under good circumstances as sufficient to set ten thousand hills in good time. But the prudent planter taking into consideration the casualties of fly, drought, &c. will do well to make a larger allowance. We know of no certain remedy or antidote against the fly which destroys the early plants.

Of the Preparation of the Land, and Cultivation of the Crop.

The best tobacco is made upon new or fresh land. It is rare to make more than three successive crops upon the same ground, of which the second is the best, the first and third being about equal. But it is more common to make only two. The new land, after all the timber and brush is removed, and the surface very cleanly raked, is twice closely coultered, as deep as two horses or oxen can pull. After this, hands with grubbing hoes pass regularly over the whole ground, and take up all the loose roots that have been broken by the coulter which are heaped and burned, or removed. One and sometimes two more coulterings are then given, and the same operation repeated with the grubbing hoes, which leaves the land in proper order to be hilled—this is universally done in straight rows at the distance of three and a half feet apart, giving the same distance as near as the eye will permit the other way—in *fresh* land, that is to say, for the second and third crop, the line of the original row, and even the locality of each hill should be preserved. After passing the coulter two or three times between each row, the hills should be made in the same place, the remains of the stalk and roots of the old plant being first removed. It is supposed, from the excess of nitrous particles contained in tobacco, above any other plant, that the partial decomposition of this stubble during the winter, imparts a degree of fertility to the spot which should not be lost by the diffusion and exposure of a general ploughing. It is most advisable too, that the hilling of new and fresh land, should be done as early in the spring as possible, say three or four weeks before planting. This affords time for the hill to settle to a proper consistence, and presents a more extended surface to be acted on by atmospheric influence, which perhaps is greater in the spring months than at any other season of the year.

On the bottom land of our rivers there are extensive alluvial flats, that bear successive crops of tobacco for many years, and some planters resort to highly manured spots conveniently situated upon high land. But in general it is considered bad economy to manure land for tobacco, both because the quantity required for that crop is greater than for any other, and because the quality of the product, as well as that made on low grounds, is coarser in fibre and less marketable. The preparation of such land, however, is the same as that of new ground, except

that the large plough and harrow are substituted for the coulter and grubbing hoe, and the hilling may be a little longer delayed.

If the seasons have been favorable, and the plant beds duly attended to as before observed, the plants will be ready to set out from the 15th to the last of May. It is most common to wait for a rain or *season* as we call it, to perform this operation, in which case the hills must be previously cut off about four inches above their base; but in early planting it is quite safe to proceed without a season, provided it is done in the evening, and the hills cut off at the same time. It is universally admitted that a moderate season is better than a very wet one; and that is considered the best, in which the earth does not entirely lose its friability, but at the same time will bear to be compressed closely about the roots of the plant without danger of becoming hard or baked. Under the most favorable circumstances, however, some plants will fail or perish, and, therefore, the ground must be gone over after every rain until the last of June, to replant the missing hills. It is not important here to describe the mere cultivation of the crop as it respects tillage, it being only necessary as in the case of all other plants to keep the earth light and free from weeds and grass. This is generally done by two weedings, first by scraping a little earth and all the young grass from the plants and then in a short time restoring the same earth, and as much more as will make a considerable hill around each. In old land, and that free from stumps, the single horse shovel plough is used with great advantage as an auxiliary to the hoe.

When the plants attain a proper size, which observation and experience will readily point out, they are to be primed and topped. The priming is merely stripping off four or five leaves at the bottom, leaving about a hand's breadth between the first leaf and the top of the hill. Topping is simply taking out the bud with the finger and thumb nails, leaving the necessary number of leaves, which in general is not more than eight, though the first topping may be to nine or ten leaves to make it ripen more uniformly, and bring the crop into the house more together. For the same reason, the late plants are not topped to so many, falling from eight by degrees as the season expires, down to six and five. A little practice, and slight attention to the manner in which the leaves grow from the stalk, will soon enable a person to perform this operation with great dexterity and despatch, without counting the leaves. All that is requisite after this until the plant is fit to cut, is to keep it from being eaten by the worms, and to pull off the suckers that grow out at the junction of the leaves to the stalk. These suckers put forth only twice at the leaves, but after that indefinitely and continually from the root, and it is thought injudicious ever to let them get more than a week old, for besides absorbing the nutriment necessary to push forward, and increase the size and thickness of the leaf, the breaking them off when of a large size, makes so great a wound as greatly to injure the after growth of the plant. In general about three months is requisite to perfect the growth of tobacco from planting to cutting.

Of the diseases and casualties to which it is subject, and its tendency to exhaust land.—Tobacco is subject to some diseases, and liable to be injured by more casualties and accidents than any other crop. That growing upon new or fresh high land is seldom injured by any other disease than the *Spot* or *Firing*, which is the effect of very moist succeeded by very hot weather. For this we know of no remedy or antidote. Tobacco growing upon old land, particularly upon low flats, besides being more subject to spot, is liable to a disease we call the *Hollow Stalk*, which is an entire decay and rottenness of the inside or pith, terminating gradually in the decay and final dropping off of the leaves. This disease is sometimes produced by the wounds caused by pulling off overgrown suckers, thereby admitting too great an absorption of water into the stalk through the wound. In land not completely drained, the plants are sometimes apt to take a diminutive growth, sending forth numerous long, narrow leaves, very thickly set on the stalk. This is called Walloon tobacco, and is good for nothing. As there is no cure for these diseases when they exist, we can only attend to their prevention. This will at once be pointed out by a knowledge of the cause, which is too much wet, and indicates the necessity of complete and thorough draining before the crop is planted. It may not be amiss here to mention, that tobacco is more injured than any other crop by ploughing or hoeing the ground when it is too wet, and to express a general caution on that head.

The accidents by which tobacco is often injured and destroyed, are high winds, heavy beating rains, hail storms, and two kinds of worm, the ground or cut worm, and the large green horn worm. High winds, besides breaking off the leaves and thereby occasioning a great loss, are apt to turn them over. The plant unlike most others possesses no power to restore the leaves to their proper position, which must shortly and carefully be done by hand, otherwise the part inverted will gradually perish and moulder away. Those who have studied the anatomy of plants can tell us the cause of this, as well as, why nature has denied to tobacco the faculty of restoring its leaves to their proper position. The ground worm, the same which is sometimes so fatal to corn, is ascertained to be the Larvæ of the common black bug found in great numbers under wheat shocks, &c. This worm is seldom or

never found in new land, but abounds in old or manured ground—and in some years I have seen them so numerous, as to have from forty to fifty taken out of one hill in a morning. The alternatives are either to abandon the crop, or to go over the ground every morning, when they can be found at or near the surface, and destroy them. The missing hills to be regularly replanted. The Horn Worm is produced from a large, clumsy, grey coloured fly commonly seen late in the evening sucking the flowers of the *Stramonium* or *thorn apple*, commonly called here the *James-town weed*. The flies deposit their eggs in the night on the tobacco, and all other narcotic plants indiscriminately as Irish potatoes, tomatoes, &c. In twenty-four or thirty-six hours the eggs hatch a small worm which immediately begins to feed on the leaf and grows rapidly. Great care should be taken to destroy them while young. Turkeys and Guinea fowls are great auxiliaries in this business, but the evil might be greatly lessened if the *flies* were destroyed, which can easily be done in the night by a person walking over the ground with a torch and a light paddle. They will approach the light and can easily be killed. In this way I have known a hundred killed in one field in the course of an hour.

Tobacco has been reproached as the cause of the general exhausted condition of our lands, of the slow paced improvement in the Virginia system of agriculture; in short as the bane of all good husbandry. This stigma, is, I am persuaded, in a great measure unmerited. It is true, that, like Indian corn, from the frequent and high degree of tillage it requires throughout the summer, it exposes the ground to be washed by hard rains, and evaporated by the hot sun; but the plant in itself is less an exhauster than corn or wheat. A proof of this is to be found in the superior growth and perfection to which any crop will arrive when grown after tobacco, than after any thing else, not excepting clover that has been ploughed in. Perhaps this may be accounted for from the facts, 1st. That the roots and stubble of tobacco left on the ground are more in quantity, and contain more of the essential qualities of manure than those of any other plant. 2d. The plant itself while growing feeds more from the atmosphere than any other: and 3dly. It is not suffered to go to seed, the process in all vegetation which is supposed to make the greatest draft on the fertility of the earth. Neither is the culture of tobacco incompatible with a proper rotation of crops, and an improved system of husbandry, for we find as extensive and successful efforts at improvement made in the tobacco region, and by tobacco makers, as in any other section of our State.

(To be continued.)

ROOTS.

We ask the attention of the South to the following communication. It comes from a thoroughly practical man, and affords a better essay upon the subject than we could hope to obtain at home. We have visited Mr. Bement's farm, and had ocular evidence of his superior skill and management. It would not do to subject all of our agricultural writers to the same test.

Three Hills Farm, Dec. 6, 1842.

Messrs. Editors,—From the very flattering manner in which you have introduced me to the readers of the "Southern Planter," I cannot resist the call to furnish you with a statement of the treatment, culture, and produce of my carrot patch and field of Sweedes.

I am not so vain as to think I can furnish any thing new on the subject, to your readers; but a plain, practical, matter-of-fact account may not be uninteresting to them.

Although the root culture has been gaining favor, in this country for several years, still, in my opinion, it has not received that attention it deserves. My soil is a loam, some parts inclining to sand and some to clay, and what is termed here, sandy-loam and clay-loam, and well adapted to the growth of roots, particularly carrots and ruta bagas. I have cultivated roots for my stock, for the last ten years and I have found no crop that pays better, for the expense of cultivation; none that abstracts less from the soil, or that leaves it in better condition for a succeeding crop. I have never failed in procuring a good crop of barley, and after ruta bagas, grass seed always *take well*. I have been less successful with oats, as the richness of the soil causes a too luxuriant growth of straw, whereby they lodge and do not fill so well.

You will recollect that my carrot patch was near my house; I call it my *accommodation* crop, from its being near by and can be worked at odd times; besides it is the scene of my labor! Do not start, gentlemen, for I assure you I do not belong to the silk-stocking gentry. If you had made your visit in the summer, you might possibly have found me in my "frock-and-trowsers" in the very midst of them, and the perspiration profusely rolling off my face in drops as large as peas.

To ensure a good crop of carrots, and it will apply equally well to all crops, it is necessary to have the soil not only rich but well worked and pulverized. As soon as the soil is sufficiently dry in the spring, I plough as deep as possible, and after one or two weeks, I haul on at the rate of sixty cart loads, (equal to thirty wagon loads,) of compost manure, and spread evenly, and harrow it thoroughly, when the plough is again put on and a shallow furrow turned, just

sufficient to cover and mix the manure with the soil. It is now suffered to rest until the seed is to be sown, which in this climate will be from the 10th to the 20th of May. Previous to sowing it is thoroughly harrowed, and then thrown into ridges, twenty-seven inches apart, which is done by turning two furrows together. A light roller is then passed over, flattening two ridges at every turn, the horse walking between them. This leaves a flat surface of about four inches wide for the drill, which follows and deposites the seed in the centre about half an inch deep; a small roller attached to the drill, follows, covering and compressing the earth to the seed, which completes the operation.

As soon as the plants are about an inch high, they are wed and thinned, which is considered the most tedious operation, which is rendered easy and expeditious by what we term the "push and pull" system. In the first place we run the cultivator, with the wings closed, between the rows, and then by standing in the furrow, with a small narrow hoe, say three inches wide, push one side of the plant and pull the other side into the furrows, which will leave the plants about four or five inches apart, which I conceive to be the proper distance. After the second working, which is merely running the cultivator between them again and cutting up the weeds, the ridges vanish and the soil becomes nearly level.

The advantages of cultivating on ridges, are, the soil is warmer and dryer, the plants are more easily distinguished, the weeds do not grow as vigorously and are much more speedily removed. The great secret in making good root crops is in thorough cultivation and a generous supply of manure.

You will recollect the carrot I cultivate is the white Belgian variety, which I esteem the most profitable on account of the great produce and the ease with which they are harvested. Unlike any other variety, from three to four inches of the root rises above the soil, which affords greater facilities in drawing, which can be done by grasping them with the hand, resembling in that respect the mangold wurtzel.

I gathered them on the 14th of October, which was accomplished in the following manner.—Each man took two rows, pulling and laying the tops all one way in a row. After they were all pulled, the tops were struck off at one blow with a knife made of a piece of an old scythe, and the roots of four rows were thrown into one; the cart followed and the roots were tossed into it with the hand. The crop obtained from the patch, which is about one-third of an acre, was 305 bushels.

It is impossible for me to estimate the expense of this crop, as the labor was done at odd times, in the morning before breakfast, when the main work was at a distance. In comparison with the ruta baga, I judge they cost about one-third more, which would bring them at about nine cents per bushel.

I agree with Mr. Botts in estimating their value. For horses and milch cows, I consider them superior to any other root. Horses become very fond of them, and fed once per day with them, their bowels are kept loose, and the hair becomes glossy, giving them a lively and healthy appearance. Cows eat them greedily and their milk is of the richest color, and the butter of superior quality. They are in such high estimation in this section, that a gentleman in the city paid me twenty-five cents per bushel for a load of them to feed his cow.

From the amount taken from the small piece, as above, I am well persuaded, that one thousand bushels, every thing favorable, can be grown on an acre.

My method of cultivating the ruta baga is similar in several respects to that of the carrot. They require a lighter soil and delight in a sandy loam, and will bear as much manure as any other crop, not even excepting corn. I have grown good crops on a sod, by turning under forty loads of fresh yard manure. I prefer, however, to have them succeed potatoes, which was the case with the field you saw in October last.

Last spring a compost of yard manure and the refuse of a glue factory, consisting of lime, bones, wool, hair and bits of pelt, was applied, say twenty loads to the acre, carefully spread after the first ploughing, and turned under with a shallow furrow and thoroughly harrowed, and mixed with the soil—then thrown into ridges twenty-seven inches apart, the tops flattened with the roller, and the seed deposited with the drill, &c. The after culture, with the exception of leaving the plants from nine to ten inches apart in the drills, was the same as that of the carrots.

There is one fact in regard to this crop which I never noticed until last summer. It so happened that a part of this field was not wed and thinned for some days after the other, and the plants and weeds had attained considerable height before they were worked, and caused about double the labor to finish them. On pulling we found them on this part of the field, less in size, necks long and tops large—termed "necky." On reflection, the same has happened before, and I could not account for it. I have also, heard others complain of the quality of their seed, that the plants would not bottom, &c. I have seen some of these patches and recollect that they were very close and there was apparently a great strife between the plants and weeds for the ascendency.

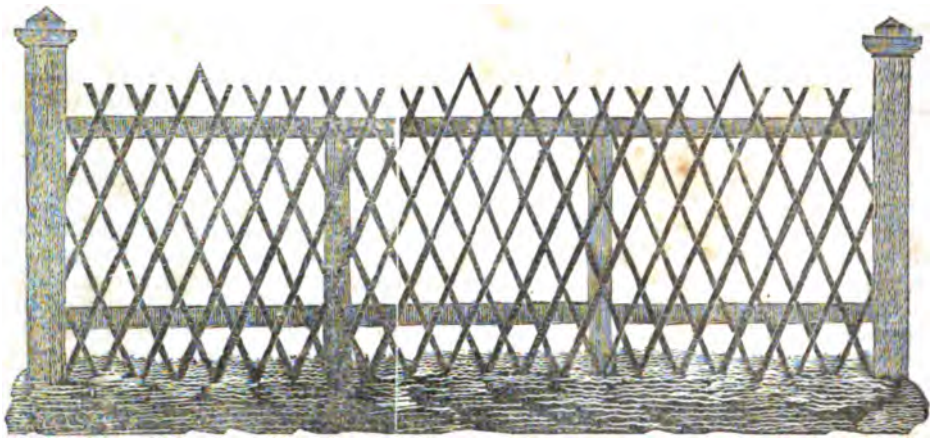
I finished pulling my crop on the first of this month, and they amounted to 2,355 bushels, and as near as I can make it out, the expense of cultivation would not vary much from six cents per bushel. We think there was not far from

three and a half acres. I feed them to my cattle, sheep and swine; and for feeding calves the first winter, they are invaluable, carrying them through in fine condition, and promoting their growth wonderfully.

In storing them I fear the heat more than the frost. I have about 1,600 bushels in a cool cellar and 600 in heaps covered with straw and earth, for feeding my ewes in May.

C. N. BEMENT.

A FENCE.



We noticed at the North a style of enclosure for yards and gardens that struck us as combining neatness and economy in a high degree.—We have attempted to illustrate it in the engraving.

The posts and rails are put up in the usual form of those to which palings are nailed, but the slats instead of being put on perpendicularly are placed diagonally and crossed so as to show perfect diamonds in the interstices. These slats are ripped with a circular saw out of the slabs and refuse timber at the saw mill; they are an inch wide and three-eighths or a half inch thick, and when crossed in the manner represented, form a very neat and substantial fence. They are nailed on to the railing just as they come from the saw, and are covered with a coat of pitch which conceals the roughness, affords a good black color and renders it extremely durable. Whitewash might be substituted for it.—Various patterns are used according to the fancy of the owner, but we think the one we have represented combines strength with neatness in a higher degree than any other we saw. If the reader, in his next journey to New York, will take the trouble to cast his eyes to the right as the cars approach Amboy, he may catch a hasty glance of the enclosure from which we made our sketch.

We will attempt an estimate of the cost of this paling. The slats will average about four and a half feet in length and will cost here probably three dollars a thousand, (at the North they are furnished for less;) they are placed about four inches apart; a thousand will, therefore, cover twenty pannels of eight feet, allowing for waste; the rails will be worth about four dollars and the posts about three dollars and fifty cents. The tar may be estimated at one dollar and the nails at fifty cents—making a total of twelve dollars for the materials, at a high estimate, in one hundred and sixty feet of paling. The workmanship may be executed by any man that can dig a hole and drive a nail.

Who would be without a neat enclosure to his yard when it can be had at so cheap a rate?

For the Southern Planter.

MUD.

Messrs. Editors,—In the November number of the Planter "A Subscriber" notices a communication, which was published over my name, relative to *river mud* as a manure. He says that "similar experiments have been made under his

observation with *swamp mud* and he regrets to say that the effect cannot be seen." The river mud differs essentially from swamp mud, as much, I suppose, as one tract of land differs from another in fertility. The former is brought principally from the mountain region by freshets, and no doubt has lime as well as other minerals in its composition; whereas, the latter is invariably formed from the washing and deposites of the neighborhood. The two experiments are entirely different, nor should I have considered it necessary to reply, if my communication had not been mentioned. If, however, any doubt still exists upon the mind of "A Subscriber," I can refer him to Major Charles Yancey, who saw the mud put on the land, and saw the crop several times whilst growing; and so much pleased was he with the fertility imparted to the land, that he forthwith proceeded to use the river mud in the same manner. Notwithstanding the difference between swamp and river mud, "A Subscriber," I think, must be mistaken when he supposes that "no advantage is derived from swamp mud and the richest ditch banks," and that after they "had been well pulverized with the frosts of winter, and spread broadcast, or put abundantly in the hill they will not produce." It appears to me, that if rich soil is put on poor land, the latter must be benefitted thereby: under this impression, I had six or eight thousand loads of earth removed from the ditch banks, during the last year, and put on the poorest parts of my low grounds which I intended for corn, and the crop fully realized my anticipations; and this year I have pursued the same course, and expect to receive a corresponding benefit. I also had river mud hauled on my tobacco land, but the freshet in July destroyed the crop, and I intend to continue its use as long as I perceive the expense and trouble of removal is paid by the subsequent crop.

If "A Subscriber" will carry the mud from his bogs, in the fall to his stable yards, his hog pens, cattle sheds, and farm pens, to be trodden by the stock and mixed with their manure, or if he will form a bank of his bog mud, lime, and dung from his stables, in alternate courses, he will in the spring have fine compost, the advantage of which put on any crop will be perceived without difficulty. If this discussion is to be continued, I hope "A Subscriber" will oblige me by appending his name to his next communication.

Respectfully, yours,

RICHARD G. MORRISS.

Buckingham, Nov. 30, 1842.

To the Editors of the Southern Planter:

Gentlemen,—In the volume of the New York State Agricultural Society, which you were kind enough to loan me a few weeks since, I was particularly struck and at the same time, much mortified, by a letter from James M. Garnett, Esq. in which he undertakes to describe the progress of agriculture in Virginia. Here is a work, the intrinsic excellence of which, must secure for it, a circulation of almost unlimited extent, in which, as I think, the agriculture of Virginia, is most *grossly*, though I doubt not, *unintentionally* misrepresented. Although even for the honor of his native State, I could not wish Mr. Garnett to exaggerate her advantages, still less do I think it consistent with good taste to dwell, as he has done, upon what are surely nothing but individual cases of mismanagement, and these too, confined to a time long passed by. If Mr. G. had told us, in the beginning, that his object was to describe the state of agriculture, *as it existed in the time of his grandfather*, we might have been prepared for the sarcasm and ridicule, which pervade his whole piece.

After describing the cattle, poor and lean, standing in the corners of fences, with their backs drawn up in the shape of a bow, Mr. Garnett says—"But let me return to the cattle of the olden time, of which I have a few more reminiscences to add. In those days, they were so utterly neglected, that it was quite common for the multitudes starved to death every winter, to supply hides enough for shoeing the negroes on every farm. This was a matter so generally and constantly anticipated, that my own grandfather, as I have heard from unquestionable authority, was once very near turning off a good overseer, because cattle enough had not died on the farm, of which he had the supervision, to furnish leather for the above purpose."

Now, to say nothing of the want of delicacy, in publishing to the world so ridiculous an incident about a venerable ancestor, I would respectfully ask what has this anecdote to do with the *present* state of agriculture in Virginia? Under different circumstances, I might have joined in the laugh, which it was probably Mr. G.'s intention to raise: but when I find it associated with *Virginia, my* mother as well as *his*, I could feel no other emotion but that of surprise and mortification.

But why does Mr. G. in such a treatise as his professes to be, drag to the light an incident, which (judging from his own age) must have transpired nearly two hundred years ago? Does he intend to insinuate that such a state of things generally prevails at present? So far from this, I do seriously doubt if a similar case has occurred since his grandfather paid the last debt of nature. Mr. Garnett is too good a writer, and too good a speaker on the subject of agriculture, to admit the idea, that he is describing the state of things on his own farm. And if it exists any where else, I candidly declare I never witnessed or ever heard of it.

With these remarks, I will take the liberty of

saying to Mr. Garnett, that if he will leave lower Virginia, and pass through the middle and western parts of the State, he will find as good native cattle, as can be found in New York or New England. Here too he will find a number of the finest imported cattle by which the farmers are endeavoring to improve their native stock. In fact it is not necessary for Mr. G. to go so far. If he will take the trouble to visit his neighboring county of King & Queen, he will find some full blooded Durhams, and he will find also many other cattle which share deeply in that celebrated cross. Within a short distance of my residence (I live in lower Virginia) I know of several Durhams, Ayrshires and Devons, all certified to be of the genuine stock, and these are diffusing themselves with great rapidity throughout the country.

But if our cattle are thus starved and thus suffer, how is it that such multitudes of the very best beeves are annually driven to the Baltimore and Philidelphia markets? Large droves also are constantly coming to lower Virginia seeking for a market, whose appearance clearly indicates any thing else than that they have been "on the lift." After this, I think Mr. G.'s candor will prompt him to admit, that his statement is a *caricature*, not a faithful picture.

Mr. G. also comments with great severity upon the draught horses of Virginia. The idea conveyed is (for I think it needless to quote his words) that the *race-horse* is such a favorite among Virginians, as to absorb all their care.—Now I am no greater admirer of the race-horse, considered as such, than Mr. G. is. In fact, I do most cordially sympathise with him in all the ridicule which he heaps upon Virginians on account of their propensity to this amusement. Yet I must in candor admit, that the chief improvement, which this noble animal has received among us, has been through the race-horse.—The best horses I ever saw for the draught or saddle, were got by the race-horse; and our most sprightly and useful mules are out of our blooded mares. If the race-horse then has occasioned a degeneracy among *men*, he has certainly much improved his own species.

But there is another charge of still graver import, which I find in Mr. G.'s letter. It is in these words—"In the tide water portion of Virginia, the average product of Indian corn per acre, does not, I think, exceed fifteen bushels, although eight or ten times as much has been made on a few farms; the average crop of wheat, in all that portion of the State of which I have been speaking, can hardly be estimated higher than five bushels per acre, if so high."

All the people then in this part of Virginia must be in a starving condition. All farmers agree, that when the average of corn falls below twenty bushels to the acre—or of wheat, below eight bushels—then these articles do not pay the expenses of cultivation. If, therefore, Mr. G. has stated the thing correctly, then all Eastern Virginia is doing a losing business.—This reminds me of an anecdote which I feel strongly tempted to detail. An Irish merchant was urging a customer to buy a certain piece of goods, assuring him that he "constantly sold his wares for less than cost." "Why then are you not a ruined man?" "The reason is a very plain one," said he—"it is because I do a *very large* business." The reason then why we are not all bankrupts, in this section of country is, because we do this *ruinous* business on so large a scale.

Now I pretend not to know what the *precise* product of these articles is. But judging from facts, I feel no hesitation in saying that Mr. G.'s estimate is far too low. Corn is considered as one of the chief staples of lower Virginia, and wheat, of upper Virginia. If the product of these articles were as low as Mr. G. has represented, then it is clear to my mind, that instead of being considered as *staples*, people would cease to cultivate them entirely. But there is another fact, which bears strongly on this subject. We raise in Virginia as much corn and wheat as we need for our own consumption, (and this is a large amount) and besides this, we have an immense surplus, which we send to a foreign market. I wish I knew how many thousands of bushels of corn and wheat, and how many tens of thousands of barrels of flour, are annually shipped from our State. Some estimate may be formed of the magnitude of this business, when I state that twenty-five thousand bushels of wheat may be ground in a single mill in Richmond, in a day. Mr. G.'s estimate is, therefore, far too low.

But then the question recurs, why should Mr. G. who is confessedly *Virginian*, every inch of him, give this statement of the agriculture of his own native State? To this I reply, that he is a *facetious* old gentleman, an excellent writer, a pleasant speaker, and in addition to this so fond of his *joke*, that he will indulge it, even at the expense of things dearest to his heart. I would not be at all surprised if in writing this letter, his object was to hoax Brother Jonathan, of New York. Hence his details of *grandfather* memory, and hence his statements of products so low, that they must necessarily issue in the ruin of any people. And yet these very people who have no bread, nor butter to put upon it, are every year sending large quantities of corn, wheat and beef to feed Brother Jonathan of the North.

VINDICATOR.

SEEDING GRASS.

Mr. WILLIAM CARTER, who is an extensive grass grower on Chickahominy, and a thorough-

ly *practical* man, informed us, in a conversation a few days since, that having read in the Planter an account of the new mode of seeding grass, practised in some parts of Massachusetts, and highly recommended by the Editor of the "Ploughman," he determined to try the experiment. Accordingly, in the month of September, 1841, he inverted the sod of his old meadows, and harrowing the surface, he re sowed his grass seed. The result was, that, in the summer of 1842, he cut the finest crop of hay (timothy and herdsgrass) that he ever took from his land. He has abandoned, forever, the idea of cleaning his meadows by the cultivation of corn or any other hoed crop, the expense of which is much greater, and the profit much less, than of grass.

Mr. Carter states that the turning under of the sod had the singular effect of completely smothering the natural and noxious growth, whilst the timothy and herdsgrass put up through it almost thick enough to prevent the necessity of re-seeding. We confess we do not understand the philosophy of this, but should rather have feared the reverse; but facts sometimes laugh at philosophy, and Mr. Carter's statement is corroborated by the evidence of many northern farmers.

There is no subject we take so much interest in, ourselves, and none in which we more desire to excite the interest of our readers, than the cultivation of grass. Any information or communication upon the subject, is, therefore, received with peculiar favor.

EXPERIMENTS WITH PLASTER AND GYPSEOUS EARTH.

The following report of experiments, made by Dr. Robert Harrison, of Prince George, was presented to the consideration of the Agricultural Society at Garysville:

"Whilst very discordant opinions prevail amongst others as to the merits of PLASTER, I have uniformly found the happiest effects from its use on my land.

"In March, I selected two pieces of adjoining land, believed to possess equal fertility; the one part was dressed with plaster, (sulp. of lime,) in the proportion of one bushel to the acre—the other had no application of any kind. The soil was a loam adapted to the production of both wheat and corn. The quantity of land selected for experiment contained in each piece seven hundred and eighty-four square yards. There was soon evinced a rapid improvement in the appearance and luxuriance of the plastered clover, which continued to progress until it was fully grown. At this time, the clover on each piece was neatly cut, suffered to wilt by exposure to the sun, then put up in cocks; the succeeding day, the hay was opened, exposed to the atmosphere sufficiently to dry it, and the quantity on each piece of land was weighed separately, and afterwards housed with the following result:—That portion, which had had a dressing of sulphate of lime, weighed 747 pounds, and the other portion, without this application, 428 pounds. Thus, it is apparent, that by an outlay of about fifty cents an acre, an additional product was realized of almost two thousand pounds of clover hay, besides an additional increased quantity of vegetable matter in the roots, which it is fair to infer were enlarged to produce the more luxuriant and vigorous growth. This is not a solitary instance of its value, but it is corroborated by additional testimony in our vicinity.

"Experiment 2. At the bottom of my marl, lies a tenacious, apparently homogenous substance, blue in appearance, and of a soapy character, which I had applied as a top-dressing to oats on land remarkably light. The amount applied was not ascertained, but upon a rough estimate I would say two hundred bushels per acre. On adjoining land, of similar texture, almost a perfect sand bank, clay was applied in the proportion of three hundred bushels per acre, also as a top-dressing after the oats were seeded. After these applications of clay and what I will denominate gypseous earth, the land was sowed with clover, and previously there was a growth of the Eastern Shore bean, a plant sometimes called the *magadabay bean*. Now for the result. On the land that had been clayed, the clover seemed to struggle for existence; it was sickly and pale and nearly all died, the past summer; the bean grew but sparingly. On the land which had received an application of gypseous earth, the clover took finely, grew luxuriantly, and surpassed in size and beauty any on the farm. Soon after harvest, it was in bloom and more than knee high. I must confess the result surprised and also delighted me, and the effects on the bean plant were equally gratifying, for its growth on this portion exceeded that on the other, five if not ten times, both in size and weight.

"I am fully of the opinion, with which all of my neighbors concur, that this earth produced more beneficial effect, than would have succeeded the application of an equal quantity of the best rotted stable manure. This substance engaged my attention about eight years ago, when I forwarded a specimen of it to the Professor of Chemistry in Philadelphia, desiring its analysis. I was informed, according to my recollection at this moment, that it contained sulphate of iron,

alumina, and some other ingredients not now remembered; but his conclusion was, that it possessed no fertilizing property. This destroyed the faint hopes I had entertained of it, but I afterwards had some of it hauled on light land, which was put in corn. I discovered no improvement in the corn crop. Even this year I discovered no improvement in the oat crop.—Last year I had some dropped around the growing corn, perhaps about fifty hills, with no manifest indication of improvement. Although I found, in each instance in which I had so sparingly used this earth, no improvement in the quantity or quality of the growing crop, I afterwards discovered, about where it was carried out, a greater growth in the size and a richer appearance in the color of the Eastern Shore bean; but I entertained great doubts whether this was to be attributed to this earth or other unknown causes. I determined, however, to try it on young clover, with the happy results above described. About the time of this application, I knew that the gypseous earth on the banks of James River had been used most successfully.

Let it be remembered that this earth had been used by me in every instance on land that had been previously marled, that is treated with earth containing carbonate of lime. It requires no great stretch of mind to suppose, that as sulphate of iron and alumina exist in the one article, and carbonate of lime had been previously applied, that these ingredients become decomposed and produce sulphate of lime and carbonate of iron, while the alumina gives the tenacity in which our light lands are so deficient. The sulphate of lime (or as it is commonly called plaster) is known to act very beneficially on clover sown on light land. And this fact may afford a clue to a satisfactory explanation of its mode of action.

METHOD OF CAUSING CABBAGES TO HEAD DURING THE WINTER.

In the fall of the year when it is time to gather cabbages, we always find more or less of them that have not formed any heads. They may have grown well, and have a large stock of leaves, but have not closed up in the form necessary to make a good, solid, compact cabbage.

William Vance, Esq. of Readfield, has practiced for many years the following method, which effectually closes these loose leaves in the course of the winter, thereby furnishing him with a supply of the best kind early in the spring. In the fall of the year, just before the ground closes up he gathers all the cabbages which have not headed, together. He then digs a trench eighteen inches or more, deep, and of sufficient width to admit the cabbages. He then closes the leaves together by hand, winding a wisp of straw or something else around them to keep them together, and then puts them in this trench, with heads down and roots up. He then packs straw or leaves and earth snug about them, and rounds up the earth over them. The trench should be dug in a place where the water of the rains and snows runs off and will not stand about them. A board, or couple of boards, nailed together in the form of a roof and put over the mound, may be useful.

In the spring of the year open your trench and you will find that the cabbages are all headed firmly together, and if the water has not got in, will be solid and hard. Mr. Vance has had the goodness to send us a few heads which he has formed in this way, which were very nice. By following this plan, we not only preserve the cabbages well during the winter, but save much of the crop which is not considered worth much.—*Maine Farmer.*

WHEAT MANURED WITH GLASS.

Mr. William Partridge, in an article in the Cultivator, suggests that pounded glass may be applied with great benefit to wheat lands. The silicate of potash, which is required by the wheat, and which is furnished by none of the usual manures, would be thereby supplied. He thinks that in this way any rich field might be made to yield sixty or seventy bushels of wheat to the acre. He reckons that about a barrel might be required to the acre, and this, he says, can be obtained in New York, ground as fine as flour, for $1 75.

For the Southern Planter.

CORN, ARTICHOKES, SHAMBLE MANURE, ARTIFICIAL WATERING PLACES.

I have heretofore been in the habit of planting my corn when the oak leaves have attained the size of a dollar, but am satisfied that in the general I have lost by the practice. The later the planting, the taller the corn is disposed to grow; and the taller, the more shade; consequently the less produce. The rows of my corn are generally five and a half feet wide, the distance in the row varying from two to four feet, according to the quality of the ground, with two stalks together; yet, in consequence of the dense shade, on my improved grounds, neither pumpkin, cymlin, nor pea can come to perfection; and I defy a weed or spire of grass to lift its head amongst such corn after it begins to silk and tassel. I have, therefore, determined to plant earlier; provided, nevertheless, that my ground shall first have been put in good condition for receiving the seed.

I have had two years experience in growing and feeding Jerusalem artichokes. Last year,

they were planted in rows four feet apart, and cultivated as corn. About the middle of October, my fatting hogs were turned into the lot and fed with corn, each rooting his own artichokes, which served not only for food, but water also. In May last about as many artichokes sprung up as I could have wished, and in June the weeds were pulled out by hand. The hogs are now again at work for their living, and so expected to be each fall until toward Christmas, when the sheep are turned into the lot for the winter. Thus, a lot of half an acre answers the triple purpose of growing artichokes, hog pen, and sheep cot; and must shortly be as rich as desirable. I design hereafter to give the lot a thorough tillage with the coulter in the latter part of April, and when the artichokes are twelve to fifteen inches high to cut out the weeds with the hoe, and thin to about eighteen or twenty inches. The artichoke grows to about the same height of corn, consequently, smothering every thing beneath after they get a few feet high.—The produce on the half acre is perhaps six hundred bushels.

I think I have heretofore informed you that I had last year made and spread seventy-two ox cart loads of shamble manure on a meadow. I have now the pleasure of informing you that the portion of meadow on which this manure was spread, yielded two heavy cuts of grass, and would have been cut the third time, had not the fall been unusually dry. The grass consisted of a mixture of greensward, (Kentucky blue grass,) and red clover, which seem to agree well, in every way. The contents of the vault of this year was cast out a few days past, and amounts to about fifty loads; and no sooner out than filling again. I am now enlarging the vault, so that it may contain about one hundred ox cart loads of decomposed manure. My ingredients are bog earth, saw dust, mould, leaves in a state of decay, ashes and flesh * The first layer is earth or saw dust, second flesh, third ashes, on which earth or saw dust is immediately cast, and the course continued. Not only my own, but some of my neighbors' dead animals are vaulted by me, and thus the buzzards are made to seek their meat in other quarters. The larger animals are cut into pieces, and spread, and such a quantity of earth or vegetable matter cast on as to secure them against exhalation. I have now on hand eight or ten old sheep, which I have directed to be shorn, then killed and their carcasses deposited in the vault; and thus I intend to treat every animal which may be unprofitable and unsaleable. A horse, which from any cause has become whorthless, should not be palmed on the ignorant, but killed and converted into manure, and the supernumerary dogs could add much to the muck heap.

I have noticed that in the last number of the Cultivator, the Editors remark that they have no faith in the plan of raising water by means of digging a hole in the earth, placing a barrel in the hole, and filling this with small stones.—Now I do not know that a barrel may have the power of extracting water, but I will tell you what I do know, and that is, water is easily extracted whence it is wont to come, barrel or no barrel. On the first day of March, 1841, I went with some hands to the top of a considerable mountain, and began to clear a tobacco plantation. No water was to be found on or about the premises, but I had faith, and faith produced works, for by digging a hole eighteen or twenty inches deep, where I had once noticed the earth to be more moist than elsewhere around, I brought forth an excellent and never-failing spring. This spring is within the plantation, and about one hundred yards of the top of the mountain. The branch from this spring does not run more than ten feet before it is totally absorbed by the porous mountain earth, and nothing is again seen of it, at least between its exit and the foot of the mountain; nevertheless, by digging I believe that I could tap it in a dozen or more places. There are many handsome building sites in mountainous regions, where water naturally is not to be had; but by digging or boreing in places where the earth is generally in a moist state, I have no doubt but that a supply can be obtained. For the purpose of boring, I would use a bar of steel two or three inches square, directing the bore horizontally in very steep ground, and in others with a dip of twenty to thirty degrees.

ZA. DRUMMOND.

Dec. 4, 1842.

* Last year I used some lime in my vault, but this year I have used none. The price when delivered at my residence is about thirty cents the bushel, which is more than I can afford to give, otherwise, I would use it in considerable quantity.

NEW FASHIONED POTATOES.

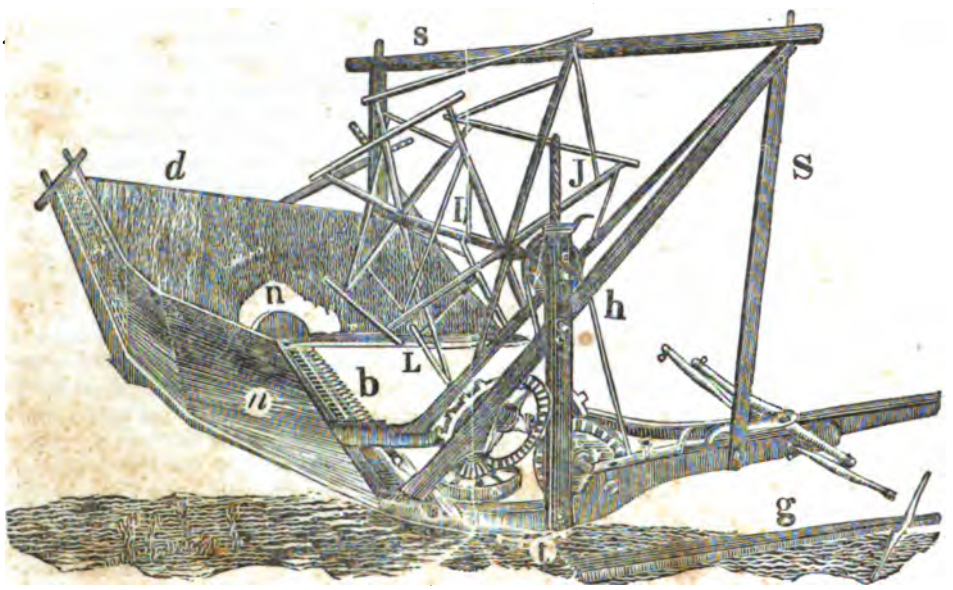
The Wheeling Daily Gazette speaks of a new species of the potato plant that has just been imported from South America. The fruit grows on vines, like pumpkins, and will do to make handsome arbors; a single seed potato being sufficient to cover a verandah. The beauty of this above-ground vegetable, is, that you can pick out the finest potatoes without damaging the plants, and leave the "small potatoes" to grow bigger.

POLL EVIL.

This disease has generally been considered incurable, but Mr. SAMUEL TERRILL, of Caroline, an old gentleman of the highest respectability, called at our office a few days since, to say, that he had found an unfailing remedy in

the little evergreen, commonly called the *ground ivy*. The leaf is gathered and dried before the fire until it can be pounded, when a table spoonful is mixed with an equal quantity of slacked lime, and the swelling, having been laid open to the bone, the mixture is laid in the wound, and kept in place by a bandage. Mr. Terrill says, that he has used it himself, and that he has known it frequently used by others, and that, in no instance, has the first application failed to effect a cure. A specimen of the plant may be seen at our office.

M'CORMICK'S REAPING MACHINE.



b. The fingers.

d. The canvass for saving the grain.

n. The small ground wheel on the offside.

n. The platform on which the cut grain is deposited.

h. The band which drives the reel.

J. A screw by which the reel is raised, and the band tightened.

g. A part of the tongue.

L. One of the ribs of the reel.

o. The fly wheel, to the crank of which the driver of the blade is attached.

S s. Braces for the off reel post.

t. The main ground wheel, which is shown in two other places.

It is not often that we present our readers with an engraving as complicated and difficult of comprehension, as any drawing of any such machine must, necessarily, be; but the universal popularity of this Reaper, and its extreme importance to the grain growing community, have induced us to tax the ingenuity of our readers in the engraving more than is our wont. We have published several testimonials of its value heretofore, but, within the last few weeks, we have had the model at our office, and held personal conversations with gentlemen who have had it in use. We had entertained fears that any machine for reaping grain, that did its work well, would be of too complicated a nature for the mechanical skill of a farmer, and too delicate for the racking which hauling over rough ground would necessarily produce; but an inspection of the model, and the testimony of others, satisfied us that the ingenuity of Mr. M'Cormick has overcome both of these difficulties. Mr. Wm.

M. Peyton and Dr. Braxton informed us, that they had not experienced the slightest difficulty in the management of the machine, and that it did its work most effectually, under the most disadvantageous circumstances. Mr. Peyton says it will cut fifteen acres per day, without leaving a single stalk standing in the field. He considers that the wheat saved in a large crop, will more than pay for the machine.

We will endeavor to describe its operation.—The machine weighs about six hundred pounds, and is drawn forward by two horses, which are amply sufficient for the draught. It rests upon two wheels, a large and strong one at (*t*), a smaller and lighter one at (*n*). On the shaft of the large wheel, is placed a drum, a band from which passing around the pulley (*x*) gives motion to the reel; upon the same shaft, is also placed a bevil wheel, that works into a pinion on a shaft lying at an angle of about forty-five degrees. Upon the other end of this shaft, another bevil wheel is placed, which works into a pinion on an upright shaft, giving a horizontal motion to the fly wheel (*o*), to the crank of the driver or pitman of which the knife is attached. The knife itself, the cutting part of which is six feet, is formed with a sickle edge, and works under the teeth upon an iron bar, beyond which it projects about a quarter of an inch; it is sharpened by merely grinding down the upper surface; but this is not required in a single crop. The teeth, represented at (*b*), are shaped like spear heads; as the machine is drawn forward, the stalks of the grain are compressed between them, and falling behind the shoulders, are held for the operation of the knife: the ribs of the reel serve also to press the stalks against the knife, before they are cut, and to deposit them upon the platform, afterwards. The raker walks along by the side of the platform, and draws the grain off fast enough to keep six or seven binders at work. As this though is tough work, he changes with the, who has nothing to do but sitting on the back of the near horse, to guide the machine by keeping his left foot touching the edge of the standing grain.

The stubble may be left from nine to thirteen inches high, by raising or lowering the knife.—This is effected by simply changing the holes of the pins which connect the tongue with the body of the machine: the other end of the tongue is fastened securely, and steadily, to the breasts of the horses; and as the machine tilts, like a cart, upon the wheels, it may of course be lowered or depressed in the manner we have pointed out. It may be as well to mention here, that although we have appropriated a pretty large space to our own tongue, that we could not find room for Mr. M'Cormick's, in the engraving, without cutting it in two, which is never done in the machine itself.

In conclusion, we will state that several of the most judicious farmers in the State have, after a careful examination, ordered machines for the coming harvest. It is also proper to state, that we have a small, *a very small*, interest in this machine, having undertaken an agency for the proprietor. The price is one hundred dollars, with the cost of delivery added.

WINTER FOWLS—WINTER EGGS.

Some of our New Jersey subscribers are desirous to learn of us the best modes of keeping hens through the winter in order to insure a good batch of eggs.

1. An important point is to have good fowls; fallow hens are a great nuisance at any time.

2. Keep no old hens; four-year-old poultry is quite tough enough.

3. Let hens have a warm place to lay and to roost in.

4. Let them have enough to eat—a supply always by them. This will prevent starvation and surfeit. Hens eat too much at a time to lay many eggs if they have long been kept hungry.

5. The food of hens should contain lime, as lime is essential to form the egg-shell. Wheat, buckwheat, and potatoes, all contain a good quantity of lime. In addition to this, old mortar, pounded, should be at hand, and gravel stones in their natural state are excellent.

6. Hens must not be suffered to harbor lice, and they will have but few, if they have an opportunity to wallow in ashes—sand is better than nothing, but ashes are best. If the hen-house has not been attended to, it should be washed with strong lie—a syringe will soon do the job on extensive walls.

7. Good nests should be provided, and fresh hay or straw is always preferred by them.—They know enough to prefer new hay and new nests to one that has been occupied by a setting-hen.

8. A change of stock should often take place, and neighbors would do well to make exchanges every season. Hens will lay more eggs in a new home than in an old one.

9. All fowls require meat, and they will not long continue healthy without it. Save for

them, therefore, all the offal from hogs and cattle, and let it remain frozen till you want it.

In addition to the above, some experienced poulterers recommend keeping hens or pullets without roosters through the winter. N. Hardy, Esq. of Waltham, insists that pullets will lay twice as many eggs when kept by themselves as when roosters run with them; of this we have made no trial, but would recommend the experiment to others.

It remains yet to be proved that hens will lay as many eggs when kept confined as when suffered to roam abroad. We generally find that they will lay more eggs when at large; but this may be owing to their finding a greater variety of food. We hope more trials will be made by shutting up and furnishing all that may be wanted for health and for production.—We find in general that he who keeps a small number has more eggs in proportion than he who keeps a large flock: this may be owing to the more choice supply of food found by the small number.—*Massachusetts Ploughman.*

AGRICULTURAL SCHOOLS.

Mr. Rives, in his late address to the Agricultural Society of Albemarle, proposes the establishment of an agricultural professorship at the University of Virginia, and the Editor of the "Enquirer," who is almost as much devoted to agriculture as to politics, seconds the proposition, and suggests, in addition, the establishment generally of agricultural schools. He calls upon the Editors of agricultural papers and certain members of the Executive Committee of the Henrico Agricultural Society to lend their aid in furtherance of the design. This produced the following beautiful response from that distinguished member of the Committee, Gen. W. H. Richardson, which we transcribe from the columns of the Enquirer:

To the Editor of the Richmond Enquirer.

"Not having time to call on you this morning, I write to express my hearty concurrence in the suggestions thrown out in this morning's Enquirer, under the head of Agriculture.

"My consideration of the subject, as you may well suppose, has not been very profound, and I am sensible that the conclusions to which it has led, are very far from being entitled to much weight. I have long admired the plan of the celebrated Fellenburg, to which you refer; and thought, as I still think, that one such school would be worth more than all the professorships of agriculture that could be established in our colleges. If the agricultural portion of our people could be awakened to their true interests, one such school at least could be established in each of the grand divisions of the State and sustained by individual subscriptions. Or, if not effected in this mode, and the financial condition of the State should not admit of the requisite aid from the public treasury, might not a tax be laid for that special purpose? It is difficult to estimate the advantages that might justly be expected from agricultural schools, in which theory and practice would go hand in hand, and where the mental as well as physical powers were judiciously cultivated. We all know, that the few landed estates which are yet left to be transmitted from fathers to sons, most frequently fall into the hands of young men just from college, who, though they may be fine scholars and qualified to attain the highest professional rank, are yet profoundly ignorant of that which it most concerns them to know—practical agriculture. So, too, of the less wealthy portion of our people, who train their sons to the labors of the farm, but most frequently in the same path, which has been trodden by fathers, grandfathers and great-grandfathers before them, but upon which not one ray of improvement has yet been shed. These young men are, according to circumstances, either portioned off with small farms, or seek employment as overseers, having, generally, little else than habits of industry, with true and honest hearts, to qualify them for the business of life. It is easy to conceive, that to all these, the education of an agricultural school would be certain independence, if not wealth.

"The want of sufficient skill in agriculture and farm management among overseers, we hear complained of by almost every farmer who employs one. It is a serious grievance; but the poor fellows themselves are not to blame, for they have no chance of better information. A case lately came to my knowledge of a lady, possessed of a good estate in land and negroes, who had been repeatedly disappointed in overseers, and at length employed one whose known industry and integrity it was hoped would suffice. But with a full stock of these indispensable qualifications, and every wish to give satisfaction, he proved so utterly ignorant of farm management, and of any standard of agriculture beyond that with which he had grown up—between the handles of an old style one-horse plough, with a wooden mould-board, and rope traces—that his employer has a certain prospect of loss upon the year's work, and he of losing his place. An experienced and observant farmer lately remarked in my presence, that many who were now struggling in the over-filled professions, and the uncertain risks of commercial pursuits, must soon find themselves driven to agriculture for a subsistence; and that, instead of every man who can command the means, sending his sons to fill the classical schools of the day, uncertain what they must

do when they attain to manhood, they should be (or a large majority of them) trained in schools of agriculture, which the public voice should compel the Legislature to establish.

"Agricultural schools should be alike accessible to rich and poor, and in the vicinity of flourishing towns, might, as you have suggested, to a considerable extent, support themselves. To the rich they would be scarcely less valuable than to the poor; as the first would there be taught how to improve and preserve his inheritance, whilst the last would learn how to acquire independence for himself and an inheritance for his children. Many farmers are most anxious to give their sons such an education; and even among the poorest and most ignorant, scarcely one could be found who would not cheerfully surrender the labor of his son for the advantage of placing him in an agricultural school. A very poor, but most respectable man applied to me early this year to take his son, a stout youth of sixteen, for five years, stating that he wished to make him a farmer—not to expose him to the vices of a town life—that he had nothing more to give him than he had already given, a plain English education—and as he hoped, good principles and good habits. It was not in my power to take the youth, and especially because I knew myself to be incompetent to teach him what his father wished him to acquire. Now, the labor of this son was worth something to the father, (a feeble man) but he was most willing and anxious to give that up, and even to permit him to labor on my farm with my negroes, for the advantage he supposed would be derived from my instruction. It was an overestimate of my qualifications—but serves to show the infinite importance to a large majority of our people, of agricultural schools.

"The press is the most powerful engine that can be brought to bear upon this important subject. I rejoice that you have taken it up, and hope that it will be pressed with your accustomed zeal —— ——. I trust too, that it will be taken up by the press universally. Half the devotion to this great cause, that the political press bestows upon the party politics of the day, would do more for the best interests of Virginia, I verily believe, than any thing besides. Our Society, there can be no doubt, will do its part.

"This is not written for publication. I am not qualified to discuss the subject in the public prints, and therefore, do not wish to appear vain enough to attempt it. Abler pens and more distinguished names than mine must do the work; and it is time that work was in hand.—Let the word be onward.

Very respectfully, yours,

——— ——— ———,

Member Agricultural & Horticultural Society of Henrico."

Richmond, Nov. 11, 1842.

To assist the press in doing the proper office, claimed from it by our correspondent, we take leave to publish his own letter, though he warns us it is not written for the public. He holds, however, a strong pen—and gives us hard common sense—and his own production brings the "powerful engine," of which he speaks, to bear at once "upon this important subject."—*Editor.*

A deep and general interest in agricultural improvement has lately been awakened in this country. We begin to understand that from this great art all others have their life and being, and that nature and circumstances combine to render its pursuit the most eligible to the great mass of our countrymen. That the art is in a comparatively rude state, and that by a better direction of the same labor, the total of its products might be greatly increased, is universally admitted. Various plans have been devised for the improvement and instruction of the agricultural community, and it is upon this subject we desire to express a few opinions peculiar, perhaps, to ourselves, but in the soundness of which we have the most unshaken faith.

Education in this country is of too indefinite a character, that is, it is not sufficiently directed to particular pursuits. A boy is sent to school from the time he is old enough to wear breeches, until he is eighteen or twenty. He is taught to read English, to write an indifferent hand, to translate Latin and Greek, and being hurried around the circle of the sciences, he is dismissed upon the world, to get his living as he can; this may do well enough as a system of education for the priviledged classes of England, from whom we have borrowed it; for those, who live upon the labors of others, it may be sufficient to induct them into those studies that please and gratify, whilst they certainly elevate and dignify the human mind; but in this country, where every man must work for his own living, something *more* is required. For all the practical purposes of life, there is not a more ignorant nor useless being, than nine out of ten of the young gentlemen, who have graduated at our universities. Let us trace the effect of this system of education in the active vocations of after life.—Law and politics are the only pursuits in which the talented youth finds his academical acquisitions of any practical use, and if circumstances deter from these, he is compelled, without knowing silk from satin, or unable, with all his *learning*, to keep a set of books, to become a *merchant;* or, more unfortunate still, he is driven to the profession of a *farmer*, without being able to distin-

guish a pick-axe from a grubbing-hoe. What is the result? Entering upon a profession of which he is wholly ignorant, he purchases knowledge at the expense of many disastrous failures, at all of which his uneducated neighbor turns up his nose, and exclaims, "so much for *book larning*;" and he is right, because, he means, so much for the want of practical knowledge.

There is no art, deserving the name, in which the genius and labor of ages has not been collected, and there is no art in which what is already known can be acquired, except by an apprenticeship of years. Nor is there any art or profession, except that of agriculture, the most important and the most profound of all, in which this principle is not recognised; even the *merchant*, generally, serves an apprenticeship, as a clerk. *Nascitur, non fit*, is made to apply to farmers and poets, alone.

Is not this fact sufficient to account for the relative depression of this noble art? How then shall we elevate it? We answer by bestowing agricultural educations upon those intended for its pursuit.

Every profession may be divided into two branches. One consists in a knowledge of the rules to be observed by those engaged in the practice of the profession, the other comprises the course of reflection and observation, by which those practical rules are deduced. In different professions, these two branches are more or less united. Whilst in the art of statesmanship they are intimately and inseparably connected, in many of the mechanic arts they are entirely separated. The iron turner is perfectly ignorant of the rationale of the engine he is building, while Watt was probably unable to fit a screw in the metallic stave his vast genius had originated. The very merchant makes daily use of formulæ obtained by the unknown calculations of the mathematician, and in all professions that are not purely mental, a knowledge of results is one thing, and the rationale by which those deductions are obtained is another. Now it seems to us that the advocates of agricultural improvement frequently forget this important distinction, and never remember that the operators should be to the theorists, or deducers, as a thousand to one. They would initiate all into the *rationale* of the rules of his art, this is neither practicable nor desirable, and by grasping at too much, we lose all. We, therefore, desire to see not only a professorship to teach the *science* of agriculture, or rather so much of it as has yet been established, but what we believe would be infinitely more valuable, the establishment of schools in which the *practice* of the art may be taught.—If mathematicians have worked out the best curve for a mouldboard, tell your pupil what it is, without troubling him with the calculations by which it has been obtained; if Liebig *has* made wonderful discoveries in organic chemistry, instruct him in the *practical results* to which they have lead, without burdening him with the scientific theories from which they have been deduced; and when no practical result is deducible from a theory, no matter how pretty, or how ingenious it may be, bother neither him nor yourself with it. Above all, teach him habits of system and industry, and make him personally familiar with the operations of the mechanical implements of his profession. This homely, plain, and practical information is what is needed by the great mass of our farmers, whilst the general object seems to be to stuff them with *science*. As well might you attempt to teach a boy to read, before he had learned his letters.

As to the establishment of private schools of agriculture, we hardly think the day has arrived when the pioneer in such an undertaking would find his pecuniary advantage in it; but for our *public* schools, we would propose such a system as the following:

Let competent teachers be provided in every district, and suitable land and buildings be obtained at the expense of the State. Boys should be admitted from twelve to fifteen, to remain six years, the only qualification required being fair moral character and the capability of spelling in two syllables. Three hours every day should be devoted to the acquisition of a plain English education, and seven more to practical instruction in agriculture or some of the mechanic arts; the product of the labor of the pupils to be devoted to the support of the establishment. Appoint an Inspector General, and take care that he is just the right sort of man, whose sole business it shall be to visit and superintend all of these institutions, and report to the Legislature the manner in which they are conducted.

This would be very much upon the principle of the celebrated school at Hofwyl, established by that distinguished philanthropist, M. Fellenberg. If we had space we should like to con-

trast the proposed with the present miserable system, if it deserves the name, that now obtains in Virginia. To make any thing of him, the teacher must have the entire control of the pupil; his studies must be conducted regularly and systematically, and the present arrangement, by which the parent sends his son to school, just when he has no other use for him, is the most useless and extravagant that can be imagined. Again, the honest pride which refuses to be the object of charity should be respected and encouraged. The character and dignity of a being, who had worked out his education by the sweat of his brow, would be as superior to that of a common charity boy, as the independence of a freeman is to the servility of a slave.

Is there a greater demand for any class than for that which, after the first six years, would be annually turned out from these institutions? We verily believe they might be made to constitute the most valuable citizens in the Commonwealth.

Is there a man in the State who does not prefer the general principles of the plan proposed, to the present common school system?

Is there a *poor* man, especially, who will not devote himself, heart and soul to the establishment of a system, which is to elevate his children from the weak and grovelling condition in which ignorance holds them; which offers to his offspring a sure and honorable passport to the condition of useful, valued, and respected members of society?

What say the people of Virginia? What say the press of Virginia? Will they take up the subject in earnest, consider, reform or extend the plan proposed, and unite their efforts with ours in bringing it before the present Legislature?

From the Nashville Agriculturist.

PUMPKINS.

Early in April I ploughed a small field, deep and close; threw about eight buck-loads of barn yard compost broadcast to the acre, and forthwith planted pumpkin seed at five feet distance in checks. I cultivated as corn until the middle of May, when the ground was pretty well covered in the more luxuriant spots with the vines. I then took hoes in hand and planted, in the replanting manner, corn in each pumpkin hill—the corn having remained in soak forty-eight hours. It came up at once, grew off kindly, and yielded a fair crop of corn—no vacant rows—corn in all.

Previously the pumpkin vines got such a start they were not checked by the growth of the corn, and now exhibit a small field more abundantly bespeckled with pumpkins, than any I ever saw by fourfold. My neighbors seldom pass without inquiring how I raise so many pumpkins and a fair crop of corn together? I tell them frankly the mode of culture, and the pumpkins show the result. I am astonished at my success; my little field—I ought to call it patch—is the admiration of all, and if this short account of the matter should be the means of helping my brother-farmer to a like success, the end in view is obtained.

PARVUS AGRICOLA.

Wilson County, September, 1842.

For the Southern Planter.

Messrs. Editors,—The accompanying certificate shows the weight of two hogs of Mr. Dicken's *white* stock. They were the refuse of a litter of eleven, pigged the 9th April, 1841, being apparently runts. The other nine were fine pigs, and were slaughtered for pork in December, 1841, when eight months and nine or ten days old. These two were then so inferior that I considered them of little value and did not attempt to fatten them. They have had only the ordinary farm keep until November last, when they were put up to fatten, and slaughtered on the 14th—being twenty months and five days old.

WILLIAM H. RICHARDSON.

The above mentioned hogs were weighed by me this day; one weighed 240, the other 275 pounds, neither of them very fat; had they been made fat, one would have reached upwards of 300—both of them were very lengthy and deep.

W. MILLER.

December 15, 1842.

HOW TO FATTEN A HEN.

Friend Paine Wingate says his experience tells him that the following process is the best mode of fattening hens. Shut them up where they can get no gravel. Keep corn by them all the time, and also give them dough once a day. For drink give them skim milk. With this feed they will fatten in ten days. If kept over ten days they should have some gravel or they will fall away.—*Maine Farmer.*

QUERIES.

To the Editors of the Southern Planter:

Gentlemen,—A neighbor of mine who has been cultivating and improving two fields for

some ten or twelve years has used plaster very freely every time he has sown clover upon them, and will continue the free use of it as long as he lives. Now I wish to know if there is not some danger of applying this substance to an injurious extent.

Is there not some land which is by nature sufficiently calcareous? land, for instance in the limestone countries which cannot be improved by the additional application of lime in any form.

I request that some of the scientific readers of the "Planter" will afford the information required for the benefit of many a

RUSTIC.

Henrico, December 12, 1842.

TO HOUSEWIVES.

Recent experiments in more than one family in this city, says the Delaware Gazette, have established that the plant known to botanists as the *Polygonum punctatum*, commonly called water pepper, or smart weed, and which may be found in great abundance along ditches, roads, lanes and barn yards, is an effectual and certain destroyer of bed-bug. It is said to exercise the same poisonous effect on the flea. A strong decoction is made of the herb, and the places infested with the insect are carefully washed therewith. The plant may also, with much advantage, be strewn about the room. Elderberry leaves, laid upon the shelves of a cupboard, will also drive away roaches and ants in a very short time.

For the Southern Planter.

Messrs. Editors,—In laying off corn rows parallel with hill-side ditches, or horizontally, where there are no ditches, I have found a very simple contrivance, somewhat like a gig-whip, answer an admirable purpose. Take an old-fashioned whip staff, such an one as our fathers drove with, and if such can't be found in these days of improvement, make one of white oak, four, five or six feet long, according to the distance designed for the rows, and to the little end of it, instead of a lash, attach half a dozen links of small chain or a heavy piece of leather about a foot long. The other end of this staff must be fastened into a piece of timber about a foot long, an inch thick, and two inches wide. In the beam of the plough, *on top* near the handles a hole must be mortised for the reception of one end of this piece of timber. As the plough passes on, this chain or leather falls into the ditch or a furrow previously run, if there be no ditch. On reaching the end of the row, the ploughman lifts up this instrument and whilst the horse is turning round, turns *it* round also. As he returns the chain falls in the furrow just made, and so on. The piece of timber must fit loosely in the beam, that it may be changed about easily.

Yours, respectfully,

P. B. W.

Nottoway, December, 1842.

From the New England Farmer.

RED OR BLACK ANTS.

Take a few sprigs of green wormwood, and place them in immediate contact with red or black ants, and they will disappear. I have found this to be effectual after using every other remedy within my limited knowledge.

Another remedy is to sprinkle chalk around the places they frequent. It is said the chalk will cause them to make their exit, but I have not had occasion to prove it. G. C.

From the Philadelphia Saturday Courier.

STALL-FEEDING.

Directions to Stall-feed Cattle—read before "The Philadelphia Society for Promoting Agriculture," June 1, 1842, *by James Mease, M. D., Vice-President.*

1. The subjects on which it is intended to lay an extra proportion of fat, must be in good condition when put up—otherwise they will not pay for the cost, feed, and care.

2 Give one handful of fine salt three times weekly to each beast.

3. The hay must be of the first cutting, (if clover) and well cured—that is, not left before cutting, in the field, until the stems are deprived of all nutritious moisture, the leaves and blossoms turned black, and when cut, turned day after day in making, until they fall off from age, and exposure to the sun, and probably a rain or two. These consequences (the last excepted) are the invariable result of sowing timothy with clover seed; for the first grass does not attain its full growth until two weeks after the latter is fully ripe, and farmers almost always refuse to cut the crop until timothy is fit to mow.—The union of orchard grass with clover, does not admit of the objections to which the first combination is liable, for both progress equally to maturity, and if cut when in full blossom, and not kept too long in the field, make a hay which cannot be exceeded. Hay should be given thrice daily, and no more put in the rack at a time, than the animals will eat before their next allowance, as they become fastidious by confinement, and will refuse hay upon which they have often breathed, and which is also impregnated with the confined air of the stable.—At night, enough must be given to last until the morning, and the remains of the former supply at all times taken away, to give place to a fresh one.

4. Water is to be given twice a day, and, if convenient, the animals may be walked to the spring, creek, or pump. The exercise will amuse them, promote their appetites, and aid of course the object in view.

5. After their hay is eaten, give from ten to sixteen quarts of Indian corn and oats ground together, to each head three times daily during ten days; then half a peck of boiled mashed potatoes, with a handful of corn meal sprinkled over them. The water in which the potatoes have been boiled must be thrown away, as I know it to be hurtful to animals. In a week, a change may be made of chopped pumpkins, or sliced Swedish turnips, or sugar beet, for the potatoes. The new food will invariably encourage appetite, unless in the event of an aversion to some one article, for which no cause can be assigned. Indian corn meal, with or without oats, must be the never-failing accompaniment of any other food.

6. Great care must be taken to watch the appetite of the animal, so as never to cloy it; otherwise, time will be lost. He must on no account be over fed—and to avoid this, during the occurrence of an increase of temperature in the air, (or "*a warm spell,*") which takes place almost every winter, the usual allowance must be diminished. The farmer should take the alarm the hour that he sees the animal leave any of his usual allowance in the trough or rack, clean out both, and by a daily walk, extra carding, and, if necessary, a dose of Glauber salts, try to restore the appetite.

7. The food, other than hay, should be given in a box and in the trough alternately, which should be daily washed or dry-scrubbed, and scraped, to prevent the remains of a former mess from turning sour, which will infallibly disgust the ox. This was the uniform practice of that first rate farmer, Joseph Cooper, of New Jersey, who urged its adoption upon the writer, as one with the importance of which his own ample experience had fully impressed him.

8. Flaxseed jelly, with corn meal, is of service occasionally to soften and loosen the skin, and produce that "kindly feel" in it which the great English improver Bakewell, ranked as an essential point in the choice and feeling of cattle; meaning thereby a "mellow, soft feel, yet firm to the touch, and which is equally distant from the hard, dry skin peculiar to some cattle, as it is from the loose and flabby feel of others."

9. Carding the animal thrice daily with appropriate cards is an all-essential part of the process. The operation is highly grateful to the animal, and its effects eminently salutary. It promotes the action of the small vessels on the surface, and the muscular fibres, which sympathise and act indirectly upon the stomach.—Medical men are well acquainted with the intimate connexion subsisting between the state of the human corporeal surface, and the stomach and viscera connected with digestion, and the same connexion is observed in the ox when feeding.

10. Regularity in the hours of feeding and watering is essential.

11. Cut straw, free from mould or smell, may be given once a day, by way of a change, slightly sprinkled with corn meal and salt. It will be eaten freely. The stable should be well ventilated, if possible—for the more pure the air, the more keenly will the animals eat. The utmost attention must also be paid to cleanliness. The animals must not be permitted, when leaving the stall to drink, to walk through a yard covered with wet manure, and to return to their stall with the clefts of their feet filled therewith—for, owing to the acrimony of the liquid, a sore therein will be the almost certain effect, with a consequent loss of appetite. This cleft must be occasionally examined in both oxen and sheep, and if found sore, should be washed with soap and water, when the application of a dossil of tow, dipped in spirits of turpentine morning and evening, for three or four days, will remove it.

12. Clean bedding is a point obvious to all.

SOAKING CORN TO FEED HORSES.

One of the best farmers in the vicinity of Baltimore, saves one-third of his corn, by soaking it before he feeds it to his horses. He places two hogsheads in his cellar, secure from the frost, and fills them with ears of corn, and pours on water to cover it. When well soaked, he feeds it to his horses, and when one cask is empty, he fills it again and feeds from the other. By the time one is empty, the corn in the other is well soaked. The cobs are so well soaked that the horses eat the whole, and they require only two-thirds as much corn when prepared in this way, and there is no doubt that this preparation and the eating of the cob with the corn, renders the food more wholesome.—*Farmers' Journal.*

For the Southern Planter.

MUD.

Messrs. Editors,—In the last number of your valuable Planter "A Subscriber" seems to be incredulous as to the good effects of river or swamp mud as a manure. I will offer my mite in its support. Some twenty years ago, I was anxious to enrich a piece of poor land, and thought I was without means to begin, but my attention was drawn to a piece of swamp or mill-pond land I had not long reclaimed, and I determined to try the mud thrown out of the ditches. Having an uncle, in whom I placed much confidence as a farmer, as well as otherwise, I consulted him upon the subject. He was of the opinion

of "A Subscriber," that it was of no value. He had made an experiment some ten or fifteen years previous, and found it perfectly worthless. I inquired of him how he managed it, and at what season of the year he got out the meadow mud; his reply was, "in the summer, and I immediately ploughed it in." I was not satisfied, and determined to try for myself. I accordingly did so, and found it to be extremely valuable—and if I had a plenty of it now, would think my time well spent in using it.

My mode of management was to scatter the mud some four or six weeks in the winter, before ploughing it in, so as to let the rains and frosts melt and pulverize it well; if "A Subscriber" will try some 150 or 200 loads of ten bushels to the acre this winter, and does not see a *very great advantage* arising from it, then I will acknowledge to him *whenever* we meet, that I am no farmer. I have not undertaken to solve the "mystery" but given him facts.

I would advise "A Subscriber" to haul his bog mud, &c. into his farm pens, and mix it with leaves, pine trash, &c.—a layer of each alternately. Let the stock dung it well, and if convenient, give a dressing of marl and clay.—Before getting it out, rick it some four or six weeks with *new* stable manure; he will find he has a valuable compost in the spring. I consider bog mud of but little value to get out on the land alone; it is too light and spongy. I have given it a trial several times to very little advantage. While writing, I will say to Mr. W. M. Peyton that we have never in this section of the country used plaster on our wheat, and are subject to the rust three years out of five.

I am, gentlemen,
Yours, respectfully,
T. M. S.

Marlboro', Gloucester Co.
Nov. 26, 1842.

In connexion with the above, we subjoin the following extract from a letter received from Mr. Robinson, of King & Queen:

"The mud of the Dragon Swamp, when hauled out upon the high land, is very valuable, and when I was a boy Mr. Thomas Fauntleroy, by the use of mill-pond mud, made a very poor field produce the best wheat of any land in ten miles of him. I have tried marsh mud after the salt tide was taken from it five years without effect, whilst the mud from an ash-sapling swamp, at the head of the tide water in a state of nature, was very beneficial.

"Col. Spencer, of this county, tried the embankment of a reclaimed marsh about eight years after it was thrown up, with very decided effect on both corn and wheat."

PROPAGATION OF MENTAL PECULIARITIES.

It is stated that one of the fine deer hounds in Richmond park, instead of seizing the deer by the ear or neck, as is usually the case when they stand at bay, always takes it by the skin of the forehead, between the antlers—a difficult place to hold it by, and one of peculiar danger to the dog. On slipping a puppy of this particular hound at a deer for the first time, when it was only nine months old, it immediately seized the deer, when brought to bay, in the same manner its mother had done, and still continues to do so.

For the Southern Planter.

Lake C. H., Indiana, Dec. 12, 1842.

In the letter of friend Botts, in the November number, there are some remarks upon his visit to the farm of Mr. Cushing particularly worthy of notice.

The spirit which prompted Mr. Cushing, a wealthy East India merchant, in his retirement from business, to select a sterile spot in the country, and spend his surplus wealth in making it bloom and blossom in beauty, is worthy of all commendation.

What a pity it is that hundreds of the wealthy cits of our large towns, would not go and do likewise, instead of hoarding up their capital in the vaults of some bank, or other shaving shops, the great amount of benefit to society, derived from their operations, consisting in the patronage that they bestow upon paper mills and engravers.

At present, the height of ambition in a retired city merchant, seems to be to get a few miles out in the country and build a palace by the side of some great thoroughfare, or upon a naked hill-top, where it will catch the eye and admiration, or excite the envy of the passer-by; where he lives upon the proceeds of his bank stock, etc. instead of devoting his wealth to the actual improvement of the agricultural condition of his native or adopted country; and actually creating happiness for himself and all around him, like your friend in his James River paradise.

True, we have no right to question, or "fall out with the taste" of any individual, as to the manner in which he shall spend his money, yet we have a right, nay a duty, to point out a way in which it can be done and produce a greater blessing to a greater number.

What noble monuments of fame the retiring merchant might raise to himself, if, when he retires from business, he would select some barren spot, like our friend Bement, for instance, and like him, set an example worthy to be followed in all similar situations. Instead of creating a

splendid mansion only for show, he might create fertility where all was barrenness, and add to his own wealth, while he bestowed comfort and happiness upon those he would employ in cultivating his land. Besides he might by his ability and means, show to the poorer class of cultivators by whom he might be surrounded, numerous experiments and improvements in the science of agriculture.

Let us then try to create a taste and fashion, for that is the despotic rule, to induce those retiring from city life, to settle in the country and devote themselves to agricultural pursuits; instead of a life of idleness, ennui, and miserable existence, for want of something to engage their minds upon, as we know is the case with the habitants of many of the "beautiful mansions" which we see in the suburbs of every city.

I have the pleasure of writing myself your friend,

SOLON ROBINSON.

NOTE.—We have had the beginning of a severe winter. The last half of November very cold, and good sleighing, which is an uncommon thing in this latitude, which is 41½°.

Agricultural productions all extremely low—our market is Chicago, on Lake Michigan, and thence to New York or Canada.

Wheat 38 a 45 cents; Corn 16 a 18 cents; Oats 10 a 12½ cents; Pork 1 a 1½ cents; Beef 1½ a 2 cents; Tallow 6 cents; Lard 4 a 5 cents.

DYNAMOMETER.

We have been frequently asked what a Dynamometer was, and we have concluded to illustrate the explanation with an engraving. The word literally means a *measurer of strength*, and it has long been employed to test the extent of muscular power. The implement is made in various forms, which are all modifications of the one represented in the engraving. It will be readily understood that any force applied at either end of the elliptical spring, the other end being stationary, will by compressing the spring cause the lever (D), to give motion to the index (E), the lever and the index being both fastened to a small plate, which revolves on a pin at (F).

To such perfection has that invaluable implement, the plough, been brought, in the execution of its work, that the great contest now amongst the manufacturers is to furnish the plough that will do its work with the least draught; this is a point of the greatest importance to the farmer, and only secondary to the quality of the work. To ascertain the ease of draught, is then the great object of the dynamometer. One end of the spring is fastened to the plough whilst the other is attached to the team; the force exerted is indicated by the movement of the index through the scale.

This implement answers very well for the purpose for which it was originally intended, viz. to ascertain the power of animal muscle when exerted against a fixed and immoveable object; but here the object is to ascertain, not the power of the team, but the resistance of the plough. This resistance varies with the move-

ment of the implement, and is much greater, from a greater impediment, at one moment than another. Thus a plough of the easiest draught, by the intervention of some obstruction in the earth, may momentarily press the index to the highest point on the scale; it is, therefore, necessary to ascertain how long the index stands at each point of the scale, that we may compare the average force required by one plough with that of another, employed in turning over two pieces of ground similar in nature and extent The ordinary dynamometer affords no opportunity of making such an estimate; for it is utterly impossible to watch and record the vibrating motions of the index: therefore, so imperfect is this implement as at present constructed, and so evidently fallacious is the test it affords, that we should have hardly considered it worthy this notice, if we had not had it in mind to make a suggestion, that may lead some mechanical genius to overcome the difficulties we have mentioned. It seems to us that to the index might be affixed an apparatus, similar to the one-half of an hour glass, supposing it to be cut in two at the centre. This should be filled with sand, and the aperture at the small end stopped until the force was applied. This apparatus, with the small end downwards, should then be affixed to the index in such a manner as to move with it. The scale should then be laid off into minute divisions immediately under the segment described by the mouth of the glass in the movement of the index; with these divisions might be connected little drawers for the reception of the sand dropped into them from the glass. It will be readily perceived that the quantity of sand in a division would intimate how long the degree of force it represents had been exerted. There might be some difficulty in estimating *very accurately* the quantity of this sand, but a little ingenuity, we believe would overcome this difficulty. To make the test, even when perfected as we have imagined, an accurate one, it is necessary that the motion of the ploughs should be the same. This might be, in a manner, secured, by using the same team to both, but a much more certain plan would be to rig a capstan to be worked by hand.

Any mechanic, who will construct an implement that will furnish a thorough test of the draught of ploughs, will confer a great favor upon the agricultural community, and will certainly afford them what they have not at present.

FRUIT.

Nothing strikes us with more astonishment than the superior attention paid to the cultivation of fruit, at the *North*. There, the most careful planting, the highest cultivation, and the most judicious pruning are bestowed upon a tree, destined to yield them a poor, sorry, tasteless peach, that never knew a "sunny side," whilst, here, where nature stands ready to second the efforts of the husbandman in producing the richest and most luscious fruit, nothing is done. Indeed, ever ready to find excuses for our own errors, it is gravely asserted that the southern climate is not adapted to the production of fruit. How often do we see farmers, liberal in their expenditures, laying out hundreds of dollars in luxuries for their families, that are not really half as grateful to them as the constant supply of delicious fruit he might afford them by a much smaller annual expenditure. There is no acre upon the farm so profitable, if money is valued for the comforts and gratification it will procure, as the garden and orchard, especially if your wife and children are fond of fruit and vegetables, as wives and children, and for that matter *husbands* too, generally, are. Reckon the cost of a fine dish of strawberries, and then see in what other way you can as well bestow your money.

As to the idea that any fruit is better at the North than the South it is all a mistake; the powers of nature can be only partially substituted by the tenderest cares of man, and the want of flavor in the more delicate fruits is readily detected by every southern palate. The Jersey peach is fair to look upon, but, like many another glittering exterior, it offers promises that are never realized. The northern men begin to understand this, and a gentleman in Philadelphia informed us, that, during the last season, peaches from Norfolk, owing to the great facility of communication, were brought perfectly fresh into the markets of Baltimore, Philadelphia and New York, and that the *Virginia* fruit was eagerly sought for, not only on account of its forwardness, coming into market two or three weeks before the Jerseys, but also for the sake of its peculiar and delicious flavor. By the bye we know no better investment than may be made in the light lands about Norfolk, to be devoted to the growth of fruit and vegetables for the northern markets. They can be delivered in Philadelphia even, the day after they are ga-

thered, and one gentleman, from Norfolk, informed us that he had, during the last season, sold the produce of a little place hardly more than a "truck patch," for $2,500, to a man, who came and gathered it for the Baltimore market.

With respect to apples too, the very best pippin we know, is grown in the county of Albemarle. Those who buy and sell are the best judges of an article, and our next door neighbor, Mr. BONAVITA, tells us, that he will pay fifty cents in the barrel more for the Albemarle pippin than for any northern apple he can get. The truth is, the flavor of southern is incomparably superior, as well it may be, to northern fruit, and yet thousands of dollars annually pass out of this State for northern apples. Our farmers are not aware to what an extent the apple business is carried. American apples are now exported to every part of the world, and we understood that one merchant in Boston, alone, was desirous to contract for thirty thousand dollars worth of apples.

We hope these remarks, which apply with even greater force, perhaps, to our friends farther south, will have the effect of arousing attention to a subject now most wofully neglected.

TO ERADICATE CORNS.

Take a small piece of flannel which has not been washed, wrap or sew it around the corn and toe. One thickness will be sufficient. Wet the flannel where the corn is, night and morning, with fine sweet-oil. Renew the flannel weekly, and, at the same time, pare the corn, which will soon disappear.—*Leeds Intelligencer.*

NEWSPAPER LAW.

The law is, and so the courts decide, that the person to whom a paper is sent is responsible for the payment, if he receive the paper or make use of it, even though he never subscribed for it. His duty in such a case is not to take the paper from the office or place where it is left, but to notify the publisher that he does not wish it. If papers are sent to a post office, store, tavern, or other place, and are not taken by the person to whom they are sent, the postmaster, store or tavern-keeper, &c. is responsible for the payment unless he immediately gives notice to the publisher that they are not taken from the office or place where they are sent.

Extract from the Post Office Regulations, page 50, section 118:—"In every instance in which papers that come to your office are not taken out by the person to whom they are sent, you will give immediate notice of it to the publisher, adding the reasons, if known, why the papers are not taken out."

BERKSHIRE AND OTHER IMPROVED HOGS FOR SALE.

Several pairs of superior Berkshire Pigs by the fine Boar Chesterfield. Two young Berkshire Sows, which will be stinted to the same Boar previous to selling. Also the finest Pigs of other approved breeds. All at reduced prices. Apply to the Editors of the Southern Planter.

OUR THIRD VOLUME.

We are happy to greet so many of our old acquaintances, who have already renewed their subscriptions to the PLANTER. Notwithstanding our large increase during the last year, and the consciousness of having labored diligently to deserve the patronage bestowed upon us, the extreme hardness of the times, and the fall of cotemporaries around us, caused us to look forward to the taking up of a new subscription with fear and trembling. The staunchness of our friends has, in a great measure, relieved our anxiety, but we have received the adieus of many old and valued acquaintances, some of the very earliest subscribers to the paper. In every instance, we have parted with feelings of the most cordial kindness mutually cursing the "times" which separated such good friends.—We have never received more high wrought encomiums than have been bestowed upon us by individuals requesting us to discontinue the paper; we were much flattered by their estimate of the work, and only regretted that it did not *quite* equal their esteem for a dollar.

We once thought it impossible that there could be a man in Virginia, who could read and write, that could not afford to pay a dollar for a paper devoted to his profession; but we are now satisfied that there are many zealous and spirited farmers, who feel it their duty to confine their expenditures to the absolute necessaries of life; from such we part with great reluctance, hoping that more propitious times will soon justify a renewal of acquaintance.

Those who know any thing about our matters, know, that we have never received any

thing like a compensation for our services. Of this we do not complain; for although our list is too small to render the profits of the paper an object, we have been contented if we could *live* through these times, seeing our reward through the vista of the future. That we have profits at all, is something to brag of, but now that they have to be divided between two of us, we hope at least they will not be lessened. We think we may say, without arrogance, that Virginia is deeply interested in sustaining the PLANTER, and that we are justifiable in respectfully urging our claims upon every farmer in our own state, at least. We have, therefore, inclosed to each of our subscribers a prospectus, with a request, that he will treat it exactly with the consideration to which he thinks it entitled: if he can, by circulating it in his neighborhood, obtain a few additional names, we shall be gratefully obliged to him for his kindness.

LAND AGENCY.

We have so many applications from persons desiring to buy and sell farms, especially the latter, that we have concluded to undertake an agency for the purpose. If any individual having a tract of land for sale, will send us a plat and description thereof, we will register it and exhibit it in our office, we will advertise it and communicate it personally to persons desiring to purchase, and do all in our power to further his views.

Purchasers will naturally resort to an intelligence office where such facilities are afforded, and we have no doubt the arrangement will prove equally acceptable to the two great classes of buyers and sellers; but it must also be made profitable to us. We will, therefore, require every person desiring our assistance in selling his land, to pay us an unconditional fee of ten dollars, in advance, or a contingent fee of fifty dollars when the land is sold, provided that a sale is effected at any time within six months from the date of the application.

ENGRAVINGS.

There is no portion of our work that gives us more trouble than the selection of proper subjects for engravings. We would have no difficulty in furnishing a plenty of embellishments; but we are anxious to give our readers three or four cuts in each number, which may not only gratify a childish curiosity for pictures, but afford them real and valuable information upon the subject of their profession. We will, therefore, be much obliged to any of our friends, who will forward us a sketch, with an intelligible description, of any implement, or fixture that is of a novel or interesting character. We will have it engraved, and thank them for their pains.

THE SIXTY DAY RULE.

Be it known to all whom it may concern, we shall rigidly enforce our sixty day rule; that is to say, our terms emphatically, are, as advertised; one dollar and fifty cents per annum, payable sixty days after the date of subscription, or *one dollar* sent free of postage *within that period*, at the option of the subscriber. We greatly prefer the voluntary payment of the dollar, but if a subscriber chooses to delay it for sixty days, that is his business, not ours. We make these remarks, because *one* gentleman was so unreasonable as to complain when we sent him a bill for one dollar and fifty cents, the sixty days having expired by more than a week.

CONTENTS OF NO. I.

Tobacco—Full and complete directions for its management, from the plant bed to the prize, p. 1.
Carrots—Mr. Bement's estimate of, and mode of cultivation, p. 4.
Roots—The value of, p. 4.
Fence—A description of a neat and economical yard or garden paling, with a cut, p. 6.
Mud—The value of river mud as a fertilizer maintained by Mr. R. G. Morriss, p 6.
Virginia—The standard of her agriculture discussed, p. 7.
Seeding Grass—A new mode recommended, p. 8.
Plaster—Results of experiments with, in Prince George, p. 9.
Blue Marl—Its value, p. 9.
Cabbages—How to make them head during winter, p. 9.
Corn—Early planting recommended, p. 10.
Artichokes—The value of the Jerusalem artichoke for hogs, p. 11. Its cultivation, p. 11.
Carrion—How to be converted into compost, p. 11.
Water—How to make a spring, p. 11.
Potatoes—A new kind—probably a humbug, p. 11.
Poll Evil—How to cure, p. 11.
Reaping Machine—M'Cormick's described, with an engraving, p. 12.
Hens—Winter treatment of, p. 13. To fatten, p. 17.
Agricultural Schools—Establishment of, recommended, p. 14.
Pumpkins—New mode of cultivation, p. 17.
Hogs—Weight of two of Dicken's, p. 17.
Lime and Plaster—Queries with respect to, p. 17.
Bed Bugs—To destroy, p. 18.
Corn Rows—To lay them off parallel with one another when they run irregularly, p. 18.
Stall-Feeding—Mode of management, p. 18.
Corn—Should be soaked for feed, p. 19.
Mud—Its value as a fertilizer, p. 19.
Solon Robinson, Esq.—Letter from, p. 20.
Dynamometer—Description of, with a cut, p. 21.
Fruit—Should be more attended to the South, p. 22.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. III. RICHMOND, FEBRUARY, 1843. No. 2.

TOBACCO.

(Continued from page 4.)

Of the Cutting, Curing and Housing.

We have now arrived at the most difficult and critical stages of the whole process; every operation from this time until the plant is cured, requiring great attention and care, as well as skill and nicety of judgment in the execution. And hence a great contrariety of practice in some of the minutiæ prevails, according to the superior skill and ability of different planters.

It is difficult to convey an idea of ripe tobacco by description. It can only be learned by observation and experience. In general, its maturity is indicated by the top leaves of the plant turning down and often touching the ground, becoming curdled, with yellow spots interspersed on their surface, looking glossy and shining, with an entire loss of fur, a manifest increase of thickness in the substance of the leaves, which when pinched in a fold between the finger and thumb, will crack with ease. But the most experienced planters acknowledge that they are more apt to err in cutting their tobacco too soon, than in deferring it too long. As a proof of this, take two plants growing side by side, of equal size and appearance in every respect, and both apparently ripe—cut one and weigh it both green and when cured: let the other stand a week longer, and when weighed like the first, the difference in favor of the latter will be astonishing. If it be asked, why we do not avail ourselves of the advantage to be derived from thus deferring the operation? It may be answered, as I have before observed, that tobacco, while standing, is liable to be injured and destroyed by more accidents than any other plant, such as hail storms, heavy rains, high winds, the depredations of worms, the growth of suckers from the root, which abstract greatly from the weight and thickness of the leaves, if suffered to grow, and which it is not always convenient to pull off. Besides this, the season of cutting tobacco is a very busy one to the planter, and too much work would accumulate on his hands by deferring it to the last moment. For these reasons it is considered most prudent to cull out the plants as soon as they will make good tobacco; in which case the loss in the aggregate amount of crop, is balanced by avoiding the risk of accidents, and being able to bestow more care and attention to what remains.

The cutters go over the ground by rows, each taking two at a time, and the plants they cut are laid in the intermediate row between them. This facilitates the picking up, as the cutting of four rows is thereby placed in one. The stalk of the plant to be cut is first split down with the knife about six inches, and after being cut off just below the bottom leaf, is inverted and laid upon the ground, to fall and become pliant for handling. The splitting of the stalk is important, both for the convenience of hanging it on sticks and accellarating the cure of the plant. To those unused to the culture and management of tobacco, it will be almost incredible to learn how soon it will *sun-burn*, (as we call it,) after being cut and turned over on the ground. This is effected by the hot rays of the sun, piercing and penetrating the tender parts of the leaves, and is manifested by the parts affected, turning white and soon becoming dry and crisp, and when cured, of a dark green color, without possessing any of the strength or qualities of tobacco. In very dry, hot weather, sun-burning often takes place before a large plant falls sufficiently to be handled without breaking off the leaves; and for this reason the cutting in such weather should always be made early in the morning, and not proceed after ten o'clock.—Sometimes it is done in the evening when there is no prospect of rain, by which the packing up may be accomplished earlier the next morning, and with less risk of burning. As soon as the plants fall sufficiently to handle without breaking off the leaves, they are *hand-fulled*, (as we call it;) that is, they are picked up, and three or four or five plants are laid together, with their tails from the sun, and the stalks inclined and somewhat elevated against the sides of some of the hills. The pickers up, after going through this ground, return and turn over each handful, that both sides of the plants may receive the benefit of the sun, and not be burned, and this operation is again repeated; if by this time the tobacco is not pliant enough to be put in *shocks*. This is putting an indefinite number of handfuls together, the stalks in an erect position, forming a sort of circle of any diameter, from two to six feet or more, at convenient distances in the field; and these shocks should be immediately and effectually covered with green bushes or some-

thing else, previously in place, for the purpose to exclude the rays of the sun.

The next operation (after the heat of the sun has declined) is to remove the tobacco to the house or scaffold, and hang the plants on sticks four and a half feet long, and about one inch square. The common pine affords the best timber for this purpose, which will rive straight and with ease. From ten to twelve plants, according to size, may be hung on each stick, the width of two fingers to be left between each plant. The scaffolds are raised four or five feet from the ground, and the poles to receive the sticks are placed four feet apart, and are made to range east and west, so that the sticks will be north and south, to give both sides an equal benefit from the sun. The tobacco is commonly removed from the field to the house or scaffold upon the shoulders of the laborers, carefully put on and taken off to avoid bruising; but if the distance is great, carts are used, greater care being necessary to avoid bruising. This is considered so important that some judicious planters make temporary scaffolds in the field, preferring the risk of injury from a smart rain, to that of bruising by moving far in a green state.

There are two modes of curing tobacco. One in the house altogether by fire; the other by the sun on scaffords. The first is esteemed the best and most effectual, but it is attended with great risk. Our houses are generally four-sided pens, twenty feet square, built of round poles, and about twelve feet pitch. The joists are placed four feet apart, the rafters immediately over them, having beams corresponding with the joists, three feet perpendicular from each other, so as to afford ranges or tiers for the tobacco up to the crown; and the same tiers are fixed below the joists and at the same distance by extending poles across the house between the logs of the pen. The house is covered tightly with pine boards, and if it is intended to cure by fire, the openings between the logs should be closed to prevent the escape of heat. Such a sized house will cure from two to three thousand weight, according to the quality of the tobacco. If it be decided to cure by fire, the tobacco is carried immediately from the field to the house, hung on sticks as before described, and these sticks crowded as close together on the tiers as they can possibly be, so as to exclude all air from the tobacco. It remains in this situation until the leaves of the plants become yellow or of the color of hickory leaves just before they fall. This will generally happen in four or five days, when the sticks must be spread and placed at their proper distances apart in the house.—About six or seven inches is the proper distance, or any other that will prevent the plants on different sticks touching each other. A moderate heat which is gradually increased to a very strong one, is then applied, by making different ranges of fires throughout the house—and that wood is preferred and sought for, which will make the greatest heat with the least blaze and smoke. The fires must be continually kept up until the curing is effected, (say from four to six days,) when not only the leaves, but the whole stalk becomes dry; and changes from a green or yellow, to a light brown color.

If it is not to be cured by fire, the tobacco is brought to the scaffold and hung, and the sticks are crowded in the same way on the scaffold, until the same yellow color is imparted to the leaves, and some planters are so particular as to cover their scaffolds with green bushes during this crowded state, to prevent sun-burning. When the proper time arrives, which is indicated by the yellow color of the leaves, the sticks are thinned and placed at such a distance as to admit the influence of the sun and air, and if the weather is warm and fair, in five or six days the curing will be so far effected as to justify the removal of the tobacco into the house, when it must be properly and finally arranged, and the cure will be gradually accomplished by time and season. But if damp, hot weather supervenes, it will be necessary, both in this and in the case of tobacco already cured by fire, to make moderate fires under each, whenever it comes in very high order. In such weather and in such order, tobacco is liable to contract a mould about the stems, which can only be prevented by keeping it dry by fires. This mould injures both the quality and appearance greatly, and cannot be easily rubbed off. Great attention is therefore necessary to prevent it by these occasional firings, until regular cool weather sets in, after which there is no danger. From the vicissitudes of our climate for some years past, and other causes, it happens commonly that some portion of our tobacco is not mature, and is left until we are compelled to cut it by the approach of frost. Such plants, even if fully ripe, seldom cure of a good color or quality for want of proper seasons. And here we may venture a general remark; which is, that tobacco cut early and fully ripe, will cure well and be of good quality under the most unfavorable circumstances, while that which comes late into the house, is difficult to cure and of inferior grade. After the housing of tobacco is all accomplished, and cool weather begins, the house should be closed with green bushes or fence rails set up on end, close around on the outside of the house, to exclude damp air, and beating rains, which generate mould, &c.

(To be continued.)

CLAY LANDS.

Mr. Allen, of the "American Agriculturist," in giving some directions for the management

of stiff clays, recommends as the most effectual mode of improvement and the most desirable where circumstances will justify the expense, the incorporation of a sufficient quantity of sand. Thorough under-draining is next advised if the cost can be incurred. At any rate, he advises where the natural fall of the land does not afford sufficient declivity to carry off the surface water, the making of beds ten or twenty feet wide with furrows leading into a common ditch with sufficient fall. He adds,

"Another mode of improvement, which to a certain extent is within every farmer's reach, and as one of the legitimate objects of every good farmer's system, is to add large quantities of coarse, unfermented manure, and all his undecayed vegetables; which may be done on a large scale, by turning in matured crops produced upon the land. There is no danger of putting on too much manure of this kind, if buried sufficiently deep, in proportion to the quantity used. And there is as little danger of suffering any loss of the manure. It will last till exhausted by the growth of vegetation. Nor will it burn the land, according to the common phrase, as an excess of manure does on light and sandy soils. It is not carried away by rains, or evaporated by heat; but like coin, securely hoarded in a strong box, it is safely retained till the owner's key is applied to unlock it. The mechanical, as well as chemical character of this soil, particularly adapts it to the preservation of manures; for in addition to its strong chemical affinity for ammonia, which is the fertilizing principle in all soils, its mechanical structure enables it to hold, beyond the possibility of escape, all the animal and vegetable substances buried beneath it."

Mr. Allen recommends, and in this we know that he is correct, that clay lands should be ploughed for spring crops in the fall. He goes on to say,

"If corn or roots are required, the land should be half ploughed the previous fall; that is, a space should be left unmolested, of the width of a furrow, on which the upturned furrow is thrown. By this operation a large dry surface is exposed to the salutary effects of air and moisture, heat and frost; and it will be in the best possible condition for early tillage, and abundant crops. It will be mellow, friable, and comparatively dry, and by thorough cross-ploughing, harrowing and rolling in the spring, it will be well fitted for the reception of the seed.

"For winter wheat we do not think them suitable, unless prepared by thorough underdraining, as the wheat is very generally winter-killed, or thrown out by the frost, or drowned by excessive rains, before the sun gets sufficiently high to protect it. But with the best varieties of spring wheat, it produces largely. For the production of rye, it is totally unsuited; but of barley, oats, peas, grass and roots, when suitably prepared, no soil produces better crops. Their chief value, however, is for grass lands, and when properly put down in meadow, they ought never to be disturbed, as with good management, they will be in a constantly improving state, and afford the most profitable and remunerating returns. But while in this condition, no animals should ever be suffered to graze them, and especially while the ground is soft. Poaching is destruction to them, and no scarcity of other food will justify the farmer in driving his cattle upon his meadows while saturated with water. It is a common opinion by those unaccustomed to them that clay lands will not produce good clover; yet we have never seen better clover, or larger crops, than we have repeatedly raised on them.

"When required for roots, corn, or other hoed crops, the soil should be well charged with manure, and the most thorough tillage will be amply repaid. 'A little land well tilled,' has a peculiar signification when applied to this kind of soil. Plaster, (sulphate of lime,) has no appreciable effect on it when applied in small quantities; and lime, (carbonate of lime,) has less than on any of the lighter soils. Ashes are valuable on any land, and, we believe, under all circumstances; yet we have repeatedly made the application of them on a very stiff clay, without deriving any immediate perceptible benefit. A longer time is required under certain circumstances, for them and other manures to act, but their action continues through a much longer period."

From the American Agriculturist.

PRACTICAL FARMING.

WHEATSHEAF FARM.—We recently made a visit to the farm of W. A. Seeley, Esq. of Staten Island. The buildings are in a style of entire plainness and simplicity, yet with perfect adaptation to the object in view. A large and well constructed windmill, of the most substantial kind, occupies one of the group of farm buildings, which is used during a great part of the year in grinding for this and the neighboring farms. But the peculiar merits of the outbuildings consist in the barns. There are two of them, of large size, and so constructed, as to afford the greatest quantity of available room. They are both built upon a side hill, thus enabling the loaded hay and grain to be drawn in upon a level with the upper side, and the entire floor is appropriated to their occupancy, while at the same time that it affords a great abun-

dance of convenient room, saves the trouble of pitching it high, and furnishes the fodder just where it is wanted to feed into the racks for the stock below. The underground room of one is divided into stalls for horses on either side through its entire range, one hundred and thirty feet, and a large gangway, accessible by folding doors at each end, runs through the centre, affording ample room for carts or wagons for the purpose of removing the manure. Water is admitted at one end through a stop-cock from a pond above, forming a reservoir from the drains. Commodious yards adjoining, afford space for exercising the animals. This barn is expressly designed for stabling supernumerary horses from this city through the winter, yet its construction admits of its being used to equal advantage for any other stock. The other barn being designed for cattle and sheep, is open on the south, and the other three sides are occupied with racks for the stock, which are divided, when necessary, by partitions and enclosures.

But the particular advantage of these barns, consists in the admirable contrivance afforded for the accumulation and economical preservation of the manure. Under shelter from the washing rains and exhausting sun, well mixed with earthy and vegetable matter, it is here retained till it can be advantageously applied to the land. Between, and contiguous to the barns, is a tank capable of holding twenty-five thousand gallons, which is the receptacle of those enriching liquids of the farm yard, without the retention and careful application of which, to the growing crops or stercorated heap, no farming arrangement can be deemed complete. An outlet near the top conducts off the surplus liquid to a heap of compost, if it rises too high before required for use, by which it is absorbed. At all other times the cistern is emptied by sheet iron buckets attached to a revolving iron chain, and propelled either by the windmill, or if necessary, by horse-power, the shaft geering into either as required.

No particle of animal or vegetable manure produced upon the farm is allowed to be wasted. All is preserved and added to the general stock of compost. The necessity of resorting to the city for manure at a large expense, is here shown to be unnecessary, and those who at first jeered at this undertaking, are now wisely following the example. Since the full organization of the farm, there has never been less than two thousand loads of surplus manure ready for use.

A small patch of the stiffest and most unpromising clay, from which, Mr. S. says his first attempt for a crop of buckwheat, resulted in a growth of about six inches; by an addition of a coating of sand ploughed in, and a subsequent one harrowed over the surface, produced a most bountiful yield. It is thus the intelligent and observing book farmer avails himself of all the principles of science and the experience of others, in his practise, and the consequence is, he gets rich, while his equally industrious and economical, but ignorant neighbor continues poor.

How many farmers in Virginia would find their advantage in selling two or three hundred acres of land, and applying the proceeds to the erection of such barns as these described by Mr. ALLEN. And the *windmill*, too, is no bad thing; we have been wanting to ascertain the cost and character of this motive power. With the improved machinery of agriculture, a general demand for "power" has arisen amongst our cultivators. How valuable to one of our large farmers would be a power, with which he could shell and grind his corn, thresh his grain, and cut the straw. Indeed, the want of such a power deters mechanics from getting up many labor-saving machines, that cannot be used without it. As for horse-power, we have never seen any yet that was adapted to the farmer's purposes. In twelve months, they are generally so out of order, that if constructed for six horses, they require four at least to overcome the friction of the machine. Water and wind are the free gifts of nature, and require neither food nor clothing. To be sure, like other free agents, they are a little arbitrary in their operations, but we doubt not that many, who do not, might avail themselves of the one or the other to a considerable extent. We know but little about windmills, what improvements have been made of late, and should be glad to learn the cost of erection, the degree of skill required for management, &c. &c.

OXFORD SAUSAGES.

The following recipe for making the celebrated Oxford Sausages, so much desiderated by the lovers of good eating in England, is from a late English publication:

Ingredients.—One pound and a half of pig meat cut from the griskins without any skin, and a half a pound of veal. One pound and a half of beef suet, the yolks and whites of five eggs. A dessert spoonful of sifted sage, after being well dried. Pepper and salt to taste.

How to make the above into Sausages.—Chop the meat into small pieces and then pound it together in a marble mortar till it is short and tender.

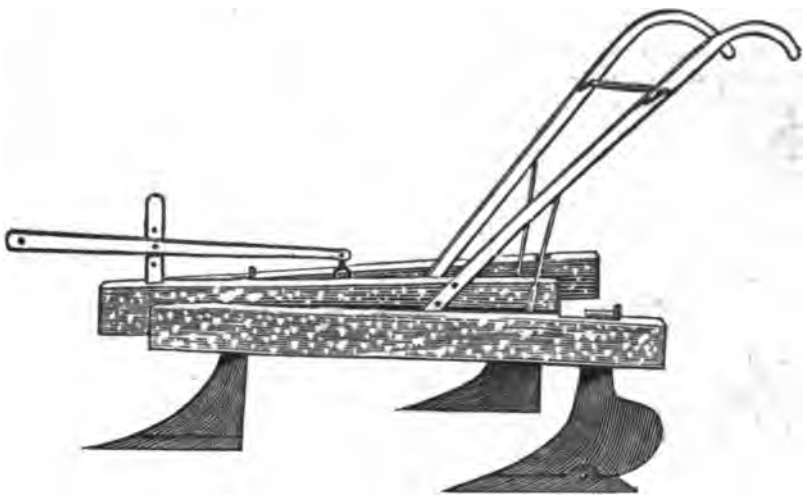
Chop the suet very fine, and when the eggs are well beaten together, after the white specks are taken out, pour the liquid over the pounded

meat and chopped suet, well kneading it together with a clean hand, throwing in the sifted sage, and pepper and salt from a coarsish pepper box during the operation, so as to let them impregnate the whole mass without being predominant in any part of it.

Press the whole when well mixed together into a wide mouthed jar, and keep it from the air in a cold place.

Roll the sausages on a flour board and use very little grease in frying them, as they will be almost fat enough to fry themselves with the aid of a frying pan.

PLOUGH CULTIVATOR.



The above is a perspective view of an implement we saw at the North, which we heard very highly recommended for the cultivation of corn. The Editor of the "Central New York Farmer" says it is superseding the common corn cultivator wherever it is introduced, and gives the following description of it:

"It is very simple in its construction, works freely in the soil and does the work much more thoroughly than the small teeth in common use.

"There is little or no improvement in the frame except that it is shorter and higher than the common one.

"The improvement consists in the use of three teeth of about four times the size of those in use—with false points; the front tooth cuts and turns the furrow both ways; the hind teeth each have a land side and false points—for the first time dressing of corn the two back teeth are set to turn the furrow inwards, that is from the corn, and at the second dressing, they are transposed so as to turn the furrow towards the corn."

This cultivator is styled "Wood's patent."—We do not know in what the claim consists, nor do we exactly see that there is novelty in the implement sufficient to sustain a patent.

From the Genesee Farmer.

NUTRITIVE QUALITIES OF CHARCOAL.

Though the importance of mixing charcoal with the food of animals, particularly that of swine, has been generally acknowledged, and its benefits extensively tested, still it has been supposed that it only acted as a corrective to the acid tendency of food, and facilitated fattening by improving the health of the animal. Some experiments are, however, on record, which would seem to show that charcoal acts a more important part in the matter than has been usually assigned to it.

In 1793, a family being driven from New York by the fever, were absent six or eight weeks before it was deemed prudent to return. A number of fowls confined in a loft to the workshop of the house, were forgotten at the time of leaving, and as it was known that there was nothing provided for their subsistence, it was expected on the return that they would be found starved to death. To the astonishment of all, the fowls were found alive and fat, though there was nothing upon which they could have fed, except a quantity of charcoal and shavings, water being supplied from the grindstone trough.

These facts coming to the knowledge of a gentleman in New York, as we learn from the

Recorder, he instituted the following experiment. He placed a turkey in a box or enclosure, four feet long, two feet wide, and three feet high, excluded light as much as could be done, and allowed a free circulation of air, and fed the turkey with soft brick, broken fine, pounded charcoal, and six grains of corn per day. The box was kept locked. At the end of a month, the turkey was killed in the presence of several gentlemen, was large and heavy, and on being opened was found filled with fat. Nothing, on dissection, was found in the gizzard and entrails but charcoal and brick. Last winter the experiment was repeated, and with the same success.

Several years since, in fitting out one of the Liverpool traders at New York, a pig on board was missing, and was supposed to have been lost. The cargo was taken on board, stowed, and the vessel sailed. It was now discovered that the pig was alive in the coal hole, but as he could not be got at readily, it was concluded to leave him to his fate. He remained in this retreat until the passage was made, when his pigship was found to be not only alive and well, but materially improved in condition, though there was nothing, coal excepted, he could have swallowed.

When it is remembered that wood, sugar, and several other substances, some of which are most nutritive, are compounded of nearly the same original elements, it would seem possible, by animal chemistry, to convert them to saving life; though all experiments with which wood or charcoal failed. The German chemists have converted wood into very palateable bread, by roasting and pulverizing; but calcination, it has been supposed, would destroy whatever powers of nutrition wood might originally contain.—The chemical action of vegetables seems to produce the least effect on coal, and not the least particle of it has ever been found in the structure of vegetables, though mixed with the earth and water in which plants were growing, in the form of the most impalpable powder. Whether animal chemistry is able to do what vegetable organization cannot, remains to be seen; though if there is no mistake in the statements alluded to, it would seem probable that this intractable substance is, in some way, made subservient to the nutrition of animals.

AMERICAN MEAT FOR THE ENGLISH MARKET.

The liberality of the new English tariff is destined, probably, by unshackling the principles of trade, to work great mutual advantage to the producers of America and the consumers of England. Preparations are now being made to supply Great Britain with the surplus produce of the beef and pork of our bountiful land, and the time perhaps will shortly come, when man will cease to put asunder what nature has joined together; when Europe and America will see how much it is to their mutual advantage to permit the extended production and free interchange of those things to which they are respectively adapted by climate, soil, and peculiar circumstances; all of which may indubitably be effected by simply leaving unshackled the common sense and keen self-interest of mankind.

The "Cincinnati Gazette" says that one establishment in that city is packing largely for the English market, under the superintendence of an experienced packer of Irish pork. The same house is also engaged in packing a large quantity of leaf lard of snowy whiteness in bladders to suit the fastidious taste of our new customer.

The Irish pork and beef, which are unrivalled, are said to be cured in a manner very different from, and very superior to, our own. A particular and complete description of the process, which is supposed to be invaluable to the meat curers of the United States, is promised in the same paper.

This may be all very good, and we should never be too proud to learn, and we do know that John Bull has been turning up his nose lately at some of our beef and pork that has appeared in the English market, but we doubt if he has seen the best of it; it may be because of our ignorance, but we are a little sceptical of finding any thing better than some hams and rounds of American curing of which it has been our fortune to partake. We should have liked especially to have brought to the notice of this imported packer an old shoulder, sent us as a Christmas gift by our friend, Mr. Edward Hill, of King William. We think he would have confessed it equal to any thing he ever saw on the other side of the water.

From the South Western Farmer.

THE APPLICATION OF HORSE-POWER TO MACHINERY.

It is, I believe, thought by many that horse-power should be applied to mills, gins and other machinery in the same manner that it is applied to drawing ploughs and wheel carriages. This, I think, is not entirely correct; but, that it should be applied to both by *draught* equally is very certain. Horses hitched to the plough, as most farmers know, perform their labor with the greatest ease when hitched low and short, so as

to bear a part of the weight of the plough on their backs by means of the back band, thus very much lessening the friction of the plough on the bottom of the furrow. But this is not the case when horses are made to draw at the lever of a gin or mill, where every pound exerted in any other than a horizontal direction is wholly lost; for it is very evident that if the lever or sweep is very low, say one foot high only, and the chains hitched 3½ feet on the horse's shoulders, and say 7 feet from the lever, that about 5-22 of the force of the horse will be exerted in an upward direction, and thus nearly one-fourth of the power will be entirely lost.—Now, to make this plain to the mind of any one, suppose the power to be so applied as to pull upwards perpendicularly to the walk. We see the machine would not incline to move any way, (that is, if it is to be drawn by a horizontal lever;) but incline the direction of the *draught* down half way in the direction which the machine is desired to be worked, that is, to an angle of 45 degrees with the horizon or walk, and we see that half the power applied will be lost only, while the remaining half will operate on the machine to be moved.

Hence we may conclude, without the shadow of a doubt, that the nearer the direction of the daught approaches the level or plane in which the lever runs, the more effect the horses or power applied will have on the machine to be operated upon; and it will be at its maximum or greatest when pulled in the same horizontal plane with the lever.

Hence we see that horses should always be hitched to a lever at least as high as their shoulder joint, care being taken to use a belly-band, to give the right bearing and direction of the chains on the collar and shoulders of the horse. And if any one should demur and say a horse pulls best when he has some weight on him, let such one put an extra weight on him, which would be the same to the horse and not diminish from but rather increase his power on the machine; but this of course I would not recommend only to those who cleave to old things simply because they are old, or because their fathers did so before them—not that I condemn old things which are true, for truth, we know, is ever the same.

Remark, horses should be hitched as close to the lever as will allow the horse sufficient room to step, for every inch over this will be attended with evident loss; for suppose him to be hitched by traces long enough to admit him to be on the opposite side of the walk, or nearly so, we see that instead of the traces pulling round the circular walk, they would take a direction across it, and pull more or less against the end of the lever, and in a direction with its length. So, it is clear that the shorter practice will allow a horse to be hitched the better, and vice versa.

The second error in use is making the circular walk too small. A walk should never be less than twenty-five feet in diameter unless it be for a turning lathe or some very light machinery, when it can possibly be avoided. Thirty-six feet diameter makes an excellent walk; but the larger that practice will allow, the better, if it were fifty or sixty feet. But, making a just compromise between the greatest advantage to be gained from the proportion and dimensions of horse-propelled machinery and its expense, I think we may safely range from thirty to forty feet—forty feet diameter perhaps makes the very best walk.

The nearer a horse pulls in a line at a right angle or in a tangent to the circumference of the circle described by the lever, the greater will be his power; but the smaller the walk, the further he will be out of this line; and the greater the walk, the nearer he will be to pulling in it. Hence, the greater the walk, the more power he can exert.

This is a subject upon which we profess to have a little knowledge, and we do not hesitate fully to endorse the above clear and excellent remarks upon the construction of horse-powers. We would add that a very important rule in bevil gearing, and one that is too frequently neglected, is, that the horizontal shaft should be exactly level, and should be so situated, that, if extended, its centre would pass immediately through the centre of the upright shaft. From the fact of this shaft's being "out of true," we have frequently seen a power that required two horses to keep it in motion, consequently, when four were attached to it, only two were employed in working the machine; the other two were in fact engaged in grinding against one another the cogs of the bevil wheels.

DISTEMPER IN DOGS.

We published in a late number a remedy for this disease, copied from the Southern Planter. We have often succeeded in curing the disease, by administering doses of salt as recommended therein; we have, however, whenever we discovered a constipation of the bowels to supervene, given every other day boluses of castile soap, with the very best effects. If castile soap cannot be had, brown soap will answer equally well, the object being action upon the intestinal viscera. In obstinate cases, where the discharge from the nostrils is obstructed, or the cough heavy and tight, we have always found the patient greatly relieved by introducing a seton in the loose skin just back of the head; which operation is performed by threading a coarse darning

needle with a double thread of coarse yarn, and running it through the skin and confining it by a tie. The thread must be moved every morning to keep up irritation, and encourage a discharge of the viscid matter, which should be daily washed off with a little warm water and soap.—*American Farmer.*

CORN FOR HAY.

We hope our planters will take measures, during the coming season, to make experiments from which we may obtain full and satisfactory reports of the value of this new and plausible mode of cultivating our old favorite. The directions are, to sow the corn broadcast, about four bushels to the acre, upon a rich well tilled lot—cover lightly with a small plough, and either use it green for soiling, or, what is probably better, permit it to proceed to maturity until the years or nubbins get into the milky state, then cut and cure it as hay—pack it away with salt, and pass it all through the cutting box.

For turning in as a green crop, it is said to be superior to any thing known to our climate and soil.

From the Farmers' Gazette.

STABLES—LITTER, &c.

Mr. Editor,—The chief business of the farmer, through the long winter months now at hand, will be the care and attention of his stock; and we hope that every careful and judicious farmer will have provided himself with convenient sheds and stables, for the comfort and health of his animals through the cold winter months. "A merciful man is merciful to his beasts," and any farmer who will neglect and starve his animals at this season, is not worthy the name of a farmer.

Stalls for cattle should be kept warm, and well ventilated, and should be cleaned every morning after the cattle are turned out. Another important point is, to have your stalls well littered with straw, cut from three to four inches in length; and as rye straw is mostly used by us for litter, in Connecticut,—we hope that no farmer, after trial, will think of littering his stables with long straw, without being cut up.

When a large quantity of straw is thrown into the hog pen, to be mixed with rich loam, or muck, it should be cut up, and then the swine will work the whole mass together, and in the spring you can fork it out easy, without pulling, or tearing, as is the case when whole straw is put in.

Last winter, being short for straw, we went to the woods, and carted home leaves with which we littered our stables. It made a soft bed for our cattle to lie upon, and when thrown out, it made good manure for any kind of crop.

It is a good plan, where manure is thrown out into a heap, to spread it about the yard; as when it is left in a heap till spring, it is apt to heat and mould,—and this is the case in particular with horse manure.

Every farmer knows, that manure kept under shelter, is worth about double that which is left out, to be washed by the rains, and undergo the action of freezing and thawing. This being the case, it will be well in constructing barns, either to have a barn cellar for the manure, or where this is not convenient, let the stables be made wide enough, to throw the manure back in a space, of sufficient width to back in a cart, and carry out the manure in the spring.

The practice of stacking out hay about the farm, has justly been condemned by all good farmers. It is calculated, in stacking out hay, to be fed to cattle, from a quarter, to a third of the hay is wasted, and besides that, the loss of manure, the leanness and suffering of the cattle, from cold and exposure, and the time spent in foddering them, makes it all a bad business from beginning to end. We will suppose a farmer, in a cold winter's morning, after a driving snow storm, to set out for a distant stack on his farm, to fodder his cattle, and after beating his way through the snow for half an hour, he at last arrives at the hay stack. But what a picture presents itself, there stand his cattle, by the side of a rail fence, their only shelter, with their hind feet drawn up so near their fore ones, that they can stand on the bigness of a shingle, shivering and shaking with cold. If this will not stir up the feelings of a man, then I know not what will, especially if he be a man of nervous temperament. If any reader of the Gazette should be in this predicament, the present winter, we hope they will make up their minds, that before another winter comes, they will provide good sheds and stables for all their stock.

If you are under the necessity of stacking out part of your hay; then bring it up and stack it around your barn-yard, where you can take it to your cattle in their sheds and stables. But what is better than all, provide yourself with extra barnroom and stabling for all your hay and cattle. It will pay you ten per cent. on the capital laid out, in the saving of hay, and manure, and the comfort, good order, and health of your animals.

And now, brother farmers, as the year is about drawing to a close, let us not forget to return our sincere thanks to the great Giver of all good, from whence all our blessings come; that he has not only spared our unprofitable lives, but that He has crowned our labors with success; that He has filled our barns, and store houses, with plenty of food for both man and beast, and that

He has brought peace, comfort, and happiness to our houses and our firesides.

Yours, &c. L. DURAND.

Derby, Dec. 27, 1842.

COMMUNICATIONS.

In the renewal of subscriptions we have received a great many accompanying remarks and criticisms upon the conduct and management of the paper. These we were much pleased to obtain; first, because they were in the highest degree friendly and laudatory, and secondly, because they afforded us some index of the public taste to which it is our business to cater. However variant and discordant might be the advice thus gratuitously bestowed upon us, the general tenor of these communications confirmed us in the popularity of the principle upon which the Planter was founded, viz: that the farmer wants a paper in which he may find a short, clear, and condensed description of the *practical* discoveries and improvements in his profession. Circumstances of a character which no one but an Editor can appreciate, have forced us, sometimes, to admit disquisitions of a general and theoretical nature, against our better judgment, and universally, we believe, to the dissatisfaction of our readers. Now in commencing the third volume, we take the liberty of saying to our correspondents, to whom we lie under a load of obligations, that we desire to confine our disquisitions to short statements of practical facts. Not that we mean to depreciate the value of scientific essays and theoretical discussions; they are excellent in their place, but *our* paper is not the place for them. Our little sheet can be filled with what we conceive to be more to the taste, aye, and if you will, more to the *advantage* of the every day farmer. Whenever scientific investigations have resulted in the establishment of well settled practical principles we shall be most happy to receive and report them to our readers. We moreover wish it to be distinctly understood, that we claim, and intend to exercise over our communications, the most despotic power, condensing, erasing, extracting, &c. &c. at our sovereign will and pleasure; and those who are not willing to subject their contributions to this arbitrary arrangement, had better seek some other channel of communication. We do not know that we shall *exactly* adopt the advice of a correspondent, who recommends us to insert no piece longer than his hand, of which, by the bye, he did not send the measurement, but we are determined to act upon the knowledge we have acquired, that pieces to be read must be as short as their nature will admit. The very great trouble and labor incident to this plan of condensation, we are willing and ready to incur.

RECIPE FOR MAKING GOOD BREAD.

James Roche, long celebrated in Baltimore, as a baker of excellent bread, having retired from business, has furnished the Baltimore American with the following recipe for making good bread, with a request that it should be published for the information of the public:

"Take an earthen vessel, larger at the top than the bottom, and in it put one pint of milk-warm water, one and a half pounds of flour, and half a pint of malt yeast; mix them well together, and set it away, (in winter it should be in a warm place,) until it rises and falls again, which will be in from three to five hours, (it may be set at night if wanted in the morning;) then put two large spoonfuls of salt into two quarts of water, and mix it well with the above rising; then put in about nine pounds of flour and work your dough well, and set it by until it becomes light? Then make it out in loaves. New flour requires one-fourth more salt than old and dry flour. The water also should be tempered according to the weather; in spring and fall it should only be milk-warm; in hot weather, cold; and in winter, warm."

FOOT-ROT IN SHEEP.

Mr. R. North, Jr. in a note to the Editors of the Cultivator, says, after trying several recipes for the foot-rot in sheep, which he had seen recommended in their paper, to very little or no purpose, he discovered by mere accident a cheap and sure cure, without much trouble or injury to the sheep, viz: "take a few bushels of lime, and put it near some place over which the sheep have to pass, say the bars; and as it is natural for sheep to jump, take notice where they alight, and place the lime there, about three inches deep. This did effectually cure my flock in about one week. The lime should be fresh and slacked, and not less than three inches deep; if deeper, it might take the hair off the leg above the hoof."

GRAIN FOR SEED.

The late Professor SPRENGEL, of Germany, is said to have remarked that his best seed wheat grew on some of his most inferior land, and that it was by no means the best for making bread.

This circumstance lead to some investigations which resulted in the discovery, that an excess of *gluten*, which gives value to the grain for manufacturing purposes, prevents the conversion of the starch into sugar, so necessary for the nourishment of the plant in germination. Limed lands produce good grain for seed, but if too highly manured, although the corn or wheat may be more abundant, and better for food, it will produce a less vigorous plant than seed grown upon poor land. Sandy soils in general, says the Professor, do not furnish good seed grain, inasmuch as such grain is deficient in certain substances, as lime, magnesia, &c. essential, nay, indispensable, to the perfect development of the germ.

CULTIVATION OF CORN.

We are pleased to lay before our readers the remarks of Mr. Young in regard to the cultivation of corn, and we are happy to find that he intends to say something more on the general management of his farm. Our readers may remember the short account we gave some time ago of a conversation we held with him, wherein we stated that *he had produced one hundred and ninety-five bushels of corn to the acre, and that his crop in the dryest seasons does not fall short of one hundred bushels to the acre.* We have no hesitation in saying that his mode of cultivation comes nearer to the perfect one than any yet published. He has produced larger crops than any one else; and his mode admits of cultivation of a larger number of acres to the hand.—He will give us, we hope, in his next, an account of his system of manuring and putting his land down in grass.

To the Editors of the Louisville Journal.

Ceylon, Jessamine Co., Ky., April 26, 1842.

Perceiving in your paper a call upon me as to my method of farming, and more particularly as to my method of cultivating corn, I hasten to comply. Your recollection of our conversation upon the subject of farming is good, though not entirely correct. As corn has been my staple, I begin with that first. My universal rule is *to plough my corn land the fall preceding the spring when I plant. As early in the spring as possible, I cross-plough as deep as circumstances will permit.* As soon as the ground is cross-ploughed, I commence checking off the first way with my large ploughs, and the second with my small ones—the checks three feet by three. This being completed, I commence planting the way it was first checked, thereby making the checks diagonally straight; the advantage of which is, that the corn can be ploughed equally well both ways—a circumstance you rarely observe even among our best farmers.—With this portion of my crop planted, I proceed to the next, and so on throughout my crop. You here perceive the advantage of this system of planting is, that the first field planted will be in condition to work by the time the last is planted. *My planting season is from the 20th to the 25th of March—a rule to which I adhere with scrupulous exactness; planting from eight to twelve grains in each hill, covering the same from four to six inches deep*—I greatly prefer the latter depth; and, in this particular, I take more pride and more pains than any other farmer in Kentucky. *I hold it as my ruling principle, that the product of the corn crop depends very much on its being properly covered, and much on its being properly ploughed the first time.* So soon as my corn is up of sufficient height, of which any farmer can judge, I start the large harrow directly over the rows; allowing a horse to walk each side, harrowing the way it was planted. On land prepared as above, and harrowed as directed, the hoeing part will be so completely performed by this process that it will satisfy the most sceptical. Allowing the corn thus harrowed to remain a few days, I start my small ploughs with the bar next the corn; and, so nicely will this be done, that, when a row is thus ploughed, so completely will the intermediate spaces, hill, &c. be lapped in by the loose dirt occasioned by this system of close ploughing, as to render other work useless at the present. *Now for the thinning part, for I profess to know nothing about replanting. I thin to four stalks in a hill.* This process may now be easily performed; taking advantage of the close ploughing, the portion to be pulled up yields very kindly at this particular stage. The second ploughing is performed with the mouldboard next to the corn. So rapid has been the growth of the corn from the first to the second ploughing, that it is performed with perfect ease. In this stage I consider my crop safe. My general rule is never to plough corn more than four times, and harrow once.—*My practice is to put a field in corn two successive years, and then grass it, and let it lie eight years*—a rule from which I never deviate. I do contend that the labor bestowed upon a sod field to put it in a state of thorough cultivation does not meet with a fair equivalent from one crop. I presume no farmer will doubt when I say the second year's crop from sod land is as good as the first—I say better, with not more than half the amount of labor. The best system of farming is to produce the greatest amount of profit from the smallest amount of labor.

I lay it down as an axiom incontrovertible, in the cultivation of corn, that whenever a large crop has been raised, it was the result of close and early planting, and I defy proof to the contrary. I propose, to all tenacious gentlemen-farmers and

others, whose curiosity leads them to try figures; they will not lie. I plant my corn three feet by three, four stalks in a hill, allowing but one ear to the stalk, and one hundred ears to the bushel, and then ascertain how many hills there is in a shock sixteen hills square, which is the usual custom of putting it up. There will then be from fifteen to sixteen shocks to the acre—query, how much to the shock? My present crop bids fair to outstrip any preceding one. It was planted on the 20th of March. I am ploughing and thinning the first planting. More of this anon.

WALTER C. YOUNG.

POTATOES.

M. Bellamy Aubert, of France, states, as the result of experiments continued during three seasons, that abundant crops of potatoes may be grown in poor clayey soils, by simply strewing the sets plentifully with rye-chaff previous to covering them with earth at planting.

Professor Voelker, of Erfwet, covers his potato sets with a layer of tanners' spent bark, two or three inches thick, before turning a furrow over them. He says he thus provides a loose spungy bed for the young tubers; prevents weeds from springing up and growing in immediate contact with the plants; and secures an abundant supply of moisture during the season, if but one soaking rain occur after planting—as the spent bark, covered by the surface soil, will retain water during the most protracted drought.—*Genesee Farmer.*

We knew a gentleman once, who planted his potato sets upon the surface of hard, well trampled ground, and covered them over with wheat straw, about twelve inches deep. His crops were excellent, and besides saving the labor of cultivation, he enjoyed the advantage of being able to feel for and pluck the full grown potatoes, leaving the young tubers to come to maturity.

VALUE OF URINE AS MANURE.

Experiments of C. Alexander.

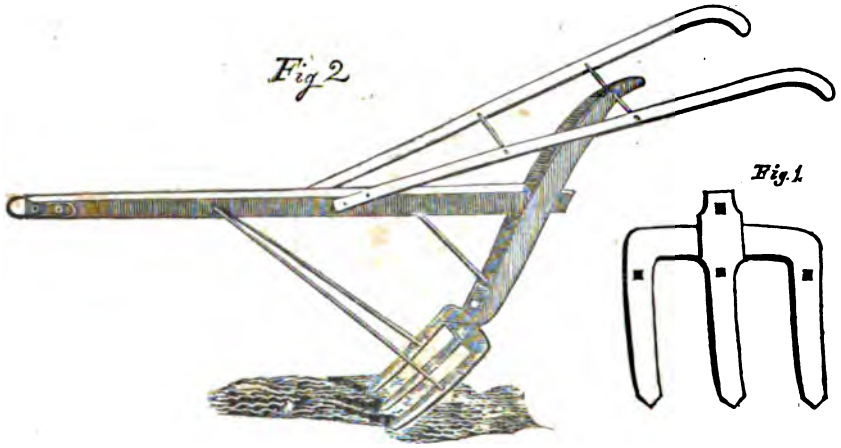
The following extract transferred from the Farmers' Magazine to that spirited and valuable agricultural work, Young's Letters of Agricola, is so important and instructive that I subjoin it:

"This intelligent farmer, Charles Alexander, near Peebles, Scotland, had long been impressed with the great importance of the urine of cattle as a manure; and he set about to discover, by a long and well conducted series of experiments, the best method of collecting and applying it. He began by digging a pit contiguous to the feeding-stall, but distinct altogether from that which was appropriated for the reception of the dung. The dimensions of this pit, according to his own account, were 36 feet square, and 4 feet deep, surrounded on all sides by a wall; and the solid contents were 192 yards. Having selected the nearest spot where he could find loamy earth, and this he always took from the surface of some field under cultivation, he proceeded to fill it; and found that, with three men and two horses, he could easily accomplish 28 cubic yards per day; and the whole expense of transporting the earth did not exceed £41 16s. When the work was complete, he levelled the surface of the heap, in a line with the mouth of the sewer, which conducted the urine from the interior of the building, on purpose that it might be distributed with regularity, and might saturate the whole from top to bottom. The quantity conveyed to it, he estimates at about 800 gallons; but as this calculation was founded partly on conjecture, for he measured not the liquor, it will be better and more instructive to furnish the DATA, that are certain and incontrovertible.—The urine was supplied by 14 cattle, weighing about 24 stone each, and kept there for five months on fodder and turnips. The contents of the pit produced 288 loads, allowing 2 cubic yards to be taken out in three carts; and he spread 40 of these on each acre, so that this urine in five months, and from fourteen cattle, produced a compost sufficient for the fertilization of seven acres of land. He states further, that he had tried this experiment for ten years, and had indiscriminately used in the same field either the rotted cow dung, or the saturated earth; and in all the stages of the crop, he had never been able to discover any perceptible difference. But what is still more wonderful, he found that his compost lasted in its effects as many years as his best putrescent manure; and he therefore boldly avers, that a load of each is of equivalent value.

"Conclusions of vast importance are deducible from this statement; and I cannot resist the feeling, of placing them in a strong and advantageous light. They speak a volume of instruction; and if we are willing to learn, they must lead to a very material alteration in the construction of our barns. It appears, then, that in five months, each cow discharges urine which, when absorbed by loam, furnishes manure of the richest quality, and most durable effects, for half an acre of ground. The dung-pit, which contained all the excrementitious matter of the 14 cattle, as well as the litter employed in bedding them, and which was kept separate for the purpose of experiment, only furnished during the same period 240 loads, and these, at the same rate, could only manure six acres. The aggregate value of the urine therefore, when compared with that of the dung, was in the ratio of seven to six; so that we are borne out by these

premises in this extraordinary inference, that the putrescible liquor which in this province, and under the management of our farmers, is wasted and annihilated as far as regards any useful purpose, is intrinsically worth more than the dung, as an efficacious and permanent dressing: and if we take into consideration, that this latter manure is not treated with any skill and judgment, it will not seem surprising, that the culture of white crops has never been carried here to any extent, since we have despised and neglected the only means of creating them."

CORN FORK.



The importance of the crop and the appropriateness of the season, will excuse our "going it strong" in the present number upon the subject of CORN.

Mr. Augustus Shriver made a report to the American Farmer, last fall, of a crop of eighty-five bushels of corn to the acre. This the Editor seems to consider a very astonishing yield for any land in the State of Maryland, and conceiving that it could be effected only by extraordinary management, calls on Mr. Shriver for his mode of cultivation. To this call Mr. Shriver responds as follows:

'Now to the mode of cultivation I have adopted for several years with the most satisfactory results. I ploughed the field, which is a light gravelly limestone soil, being a tough blue grass and clover sward, about the first of last November, to the depth of nine inches; harrowed it the 6th of April, lengthwise the furrow; the ground being at that time remarkably light and mellow. Manured it with fresh barn-yard manure, at the rate of fifteen five-horse wagon loads per acre. I spread and plough in my manure immediately after the wagon. The manure was turned under but about two inches deep. I like to keep it as near the surface as possible, so that it is out of the reach of absorption from the rays of the sun. Harrowed the ground lightly with the ploughing, and laid off the rows five feet distant, running the rows north and south. I had boys to drop, and I directed them to drop it a good step, (about twenty-six inches,) and from five to seven grains in a hill. This may seem close; but if you take into consideration the width of the rows, the distance between four hills will be something upwards of ten square feet. I am convinced that if corn has a free circulation of air one way, it can be planted almost as thick as it can stand the other. I did not harrow the field in question, which I always had done, heretofore, as soon as the corn is up, and plaster. The season being so wet at the time, I did not like to work it; when the ground was sufficiently dry the plants were too high for a large harrow to pass over them, and having but a poor opinion of the one-horse harrow, I treated my crop as follows:

"1. Cultivated it June 1st and 2d, merely setting up what corn was covered, going three times in each row.

"2. June 7th and 8th, cultivated it as before, thinning it down to four stalks, and if a hill had less, left enough stalks around it to make up the deficiency. Gave it a thorough hoeing, that is, chopped away the old hill and gave it fresh ground, cutting up every spear of grass.

"3. Ploughed it with shovel ploughs June

13th, 14th, 15th, going four times in each row, throwing the ground well up to the corn. Having given it a good hoeing before, it was quite clean, and might have done without it this time. However, I made my hands follow the ploughs and level off around and between the hills.

"4th, and last time, I used a large iron fork with three prongs, about fourteen inches long, attached to a shovel plough. I prefer this implement to the cultivator for the last working, as it cultivates the ground deeper, and can be run nearer the corn without injury.

"The last working I consider of the most importance; by leaving the surface level and well pulverized, you insure to the roots every advantage in searching out for nourishment.—Nothing, in my opinion, is so much calculated to check the growth of corn as leaving deep furrows in the rows. We all know that the roots of corn extend for many feet around the hill, and also that their depth in the soil is regulated by the season. Knowing this to be the fact, how can it be otherwise when a root comes in contact with a deep furrow, than that it has to turn down into the cold uncultivated ground, and as a natural consequence, the stalk becomes sickly and decrepit. I have often been surprised that intelligent farmers should continue to have their fields *gutted*, by having so many ditches running through them, extracting the substance from the soil, when a moment's reflection would have convinced them of the absurdity of the system.

"One great advantage of the mode which I have adopted, is, that the manure is applied in the spring, while it is yet warm, and contains all the gases and salts; a great part of which it loses by remaining in the yard subject to the absorption of the atmosphere, not to mention the great loss sustained by the heavy spring and summer showers. Whether manure loses as much by being applied in the spring to corn, as it does by remaining in the yard till fall, is, in my opinion, a very doubtful point. I believe it is a general opinion that corn does not require the same kind, or at least does not extract that portion of the manure which is more particularly adapted to wheat; hence I have concluded, that taking a crop of corn does not impair its capabilities for producing a crop of wheat; but, the contrary, prepares it for wheat by having it fully incorporated with the soil."

In a subsequent number, Mr. Shriver gives a drawing (of which our engraving is a copy) and the following description of the fork alluded to above:

"Fig. 1, represents a front view of the fork itself, which is made of iron 3 inches by ½ inch; the teeth should be 14 inches long, and the whole fork 16 inches broad. The middle prong must be made very strong when it is attached to the leg.

"Fig. 2, is the plough with the fork appended to it. It is attached to the plough by ten screws, the same as a shovel. In rocky ground there is great strain on the outside prongs occasionally, and to obviate this difficulty I had them secured by half inch rods, screwed to the outer prongs four inches from the upper corner, and secured to the beam by staples. The points of the prongs are made in the shape of cultivator teeth. If you think this implement worthy of notice in your valuable paper, you are at liberty to use it in any manner you please.

Yours truly, AUGS. SHRIVER."

STAYS.

McPherson, in his work on China, after describing the singular and unnatural process to which the foot of the Chinese lady is subjected, sarcastically remarks, "It would be as difficult to account for the origin of this barbarous practice of the Chinese, as for that of squeezing the waists of English women out of all natural shape by stays, or flattening the heads among the natives on the Columbia." We hardly think it fair to place the three in the same category, for whilst the *civilized* habit of lacing is equally ridiculous, it is much more injurious to the health, than the other two.

For the Southern Planter.

RUTA BAGA.

Messrs. Editors,—In my communication on the culture of the white carrot, I promised to give you my method of cultivating, and the product of my field of Ruta Bagas.

The piece you saw when at my farm, contained about three and a half acres, and had lain in pasture a number of years; it was carefully turned over in the fall of 1840; and in the spring following, cross-ploughed and harrowed, and laid out in furrows two and a half feet apart, and planted with potatoes. The knolls, which incline more to sand, were manured with horn-shavings and hogs' bristles, one handful to each set. Twelve rows through the middle were manured with salt mackerel, which were spoiled, half a fish to every set. It was an unfavorable season for potatoes, a severe drought in the summer having injured their growth. The rows manured with the salt fish, I noticed, stood the drought much better than any other part of the field; vines large and of a dark healthy color, when the others were brown and shrivelled, and on digging we found them of a large and even size, and of excellent quality, and the yield far better than any other part of the field.

Last winter, I purchased twenty-six two-horse loads of the refuse of a glue factory, consisting of lime, bones, wool, hair, and pieces of pelt, some of which had lain for two or three years. To twenty loads of this I added forty loads of yard manure, and had it well mixed. In the spring it was ploughed seven inches deep, and left until the middle of June, when the manure was hauled on and evenly spread, which covered all except about three-quarters of an acre, on which was put six loads of the factory refuse, without any yard manure. The piece was then ploughed and harrowed, thoroughly mixing the soil and manure. It was then thrown into ridges twenty-seven inches apart, the same as for the carrots; tops flattened with the roller, and seed deposited with the drill, (Bement's,) on the 18th of June.

On that part of the field where the yard manure was applied, the plants made their appearance on the fourth day after sowing, while on that part where the refuse of the glue factory was put, they showed very few plants until the tenth day, and then they were sickly in appearance, and grew so tardily that the flea devoured them about as fast as they made their appearance. In fact, we were obliged to transplant to fill up vacancies, on the whole three-quarters of an acre—showing most conclusively the ruta bagas require a quick and active manure to give them an early start to get them out of the way of their greatest enemy, the turnip flea or beetle.

On the 18th of July, the cultivator was run between the rows, and they were thinned with the hoe in the same manner as the carrots, leaving the plants from eight to ten inches apart in the drills. In August, the cultivator was again run through them, and they were hoed at intervals when convenient. Nothing more was done to them until we commenced pulling in November. The crop measured 2,355 bushels. I will here remark, that when the salt fish was used the year previous, it was strikingly visible, at some distance; the tops being of a darker hue, higher, and more vigorous, and they continued so through the summer, and on raising we found them thicker and longer in the neck and smaller in the bulb, showing that salt will increase the top at the expense of the bottom.

The greater part of the crop was stowed in a cellar—the remainder was put in heaps, in the field, for feeding my ewes when they have lambs in the spring. The heaps are made in the following manner, which I never knew to fail, when they were properly attended to. A trench six feet wide, of any length required, and one foot deep, is dug in a dry situation, generally on a knoll; the roots are thrown into this trench and piled up in the form of a roof. A coat of straight straw of from eight to ten inches in thickness, is put on in such a position as to conduct the water off, if any should reach it. Earth is now thrown on by digging a trench around the heap, beginning at the bottom and going around until the whole is covered. The earth will press the straw, which prevents its running through to the roots. A coat of ten to twelve inches, in this climate is sufficient for our common winters. The trench will prevent the water from getting into the heap. There is more danger of getting the covering too thick than too thin. I have suffered more from heat than frost. After the earth is all put on, it should be carefully clapped down with the spade, to make it more effectually shed the rains. After a few days I take a crowbar and thrust it in the top along the ridge down into the heap, no matter if it breaks some of the roots, and open holes about three feet apart, to let the gas or vapor off, which is generated by a partial fermentation. A flat stone, raised a little, on one edge set up an inch or two, or a wisp of straw may be put into the holes to prevent the rain from getting in, which completes the work for the winter.

With me the ruta baga is a valuable crop.—They afford the greatest quantity of food, for my stock, from an acre, while they seem to exhaust the land less and leave it in the best possible condition for a succeeding crop. It is too rich for oats, but well calculated for barley, and clover seed always "takes" well, sown with it. I feed them to my cattle, sheep, hogs, (boiled,) and occasionally to my horses. For calves, the first winter, they are very valuable, keeping their bowels open and loose; they will grow and thrive without running too much to fat; their coats smooth and glossy, and continue to grow through the winter, and "go to grass" in fine condition, by which they gain at least six months in their growth over those wintered in the too common and ordinary way. Heifers wintered in the above manner will answer to come in at two years old. I have one now in my yard that will not be two years old until January next; she had a calf last March, and has been milked ever since, and I cannot perceive that her growth has been retarded in consequence, and she is now as large as common three year olds.

C. N. Bement.

There is a simplicity, perspicuity, minuteness, and exactness in Mr. Bement's reports of agricultural experiments, worthy the imitation of all those who would assist in the collection and dissemination of agricultural facts.

PEACHES AND GRAPES.

Great difficulty has been experienced in this region, in raising peaches and grapes. We were informed by a gentleman who lately visited New Haven, Connecticut, that a plan has been adopted there, which secures to them an abundant supply of peaches and grapes. The plan

is to place a barrel round the tree or vine in the winter, and fill it with snow well pressed down, and leave it until the whole has melted away. The tree and the grape vine are thus prevented from putting forth early, and escape the early frosts, which in this region, is a matter of great difficulty. It is certainly worthy of an experiment. The notices in our paper, of the delicious peaches raised at Utica this season, encourage us to hope, that we may yet have an abundance of this choice fruit.—*Massachusetts Ploughman.*

For the Southern Planter.

VALUE OF SEASONING FIRE-WOOD, &c.

We make the following extract from a letter received from Mr. GEORGE W. CRAVEN, of Albemarle. We shall be very happy to have a description of his tobacco fixtures, which we doubt not would be highly interesting and instructive to a large class of our readers.

"Perhaps, gentlemen, I can throw out a useful hint (whilst I sit by a cheerful *seasoned* wood fire,) on the importance, comfort, and saving of labor by having seasoned wood instead of green. In the first place, it does not require more than half the labor to load and unload, and half the labor to haul, which is no small consideration. And then half the quantity of seasoned wood makes as good a fire; for two or three sticks of seasoned wood makes a good fire, and you get the benefit of the whole of it, as none goes off in smoke to make foul chimneys. For smoke is nothing more nor less than unconsumed fuel. Therefore, I would advise all farmers to cut their fuel the winter before it is used; split it and set it up. If for market, no one that considers comfort and economy will object to it because it is seasoned. It is a fact, that any wood, when seasoned, makes a good fire, whereas, there are many kinds of green wood that make an intolerable one. For instance, pine wood green will scarcely burn at all—when seasoned, it makes a respectable fire. All kinds of timber are better for being seasoned. If farmers would cut and split their stakes there would be no need of burning. Fencing and hauling is more expeditiously done when the rails are seasoned. I consider one of the greatest secrets in farming is a judicious saving and application of labor in the various operations of the farm. For labor saved is money made. I have spent some fifty dollars in the last twelve months (as hard as the times are) in labor-saving machines, and consider the money not badly spent. In the first place, it occurred to me that a great saving of time and labor might be made in the tedious process of shelling corn by hand. I therefore had a machine made with no extra work but a whirl for the machine band to run on, cost, $12 50. I can in ten minutes detach my machine (threshing box) and attach my corn sheller, and in a day, I can shell corn sufficient to last man and beast for a month or more, with but two horses and two men and a boy to drive. I also had a straw cutter made with the same extra work, a whirl, cost $25, which I can attach to the same machine in five minutes, and cut straw enough in one rainy day to last several weeks for some twelve head of horses, and as many cattle. So you see it is not only a saving of labor but you do it all in bad weather with but few hands.—And then when the weather is fair, I have no hindrance of this kind to delay my work, but go right ahead, from morning until night, and no stopping to shell corn and cut feed. I cut up every thing for my horses (or rather I make them do it) and I never allow a ear of corn to go in their troughs until it is ground and mixed with some kind of cut straw or chaff. In the winter months, I have my servants' breakfast prepared for them while they are feeding, so that they do not go to work before sun-up in cold weather, which I consider a saving of time, for they cannot do much in cold weather before breakfast.

"I have been at considerable expense in the last year in constructing buildings and other fixtures for the more convenient management of the tobacco crop, and I flatter myself that I have, in a measure, succeeded, which if you consider of sufficient interest, I would furnish you with, together with the process of managing this troublesome but profitable crop.

Your sincere well-wisher,

GEORGE W. CRAVEN."

DRIVING CATTLE.

I have often witnessed the infliction of cruelties on dumb beasts accused of sullenness, by persons attempting to lead or drive an animal alone. This subject was brought to my mind so forcibly a few days since, by a neighbor sending a boy to lead a heifer a distance of several miles, by a rope attached to her horns and nose, that I determined to write a line upon it. The restiveness of cattle in such cases is caused by skittishness. The remedy is simple and efficient. Fasten a board before the face, in the usual manner of blinding breachy cattle, and the wildest cow or heifer may be led or driven with perfect ease.—*Maine Cultivator.*

OUR CLIMATE.

A Mr. LOCKE, who is highly spoken of as a gentleman of undoubted scientific attainments, has been delivering a series of lectures at the North, to establish a doctrine which he has been for some time promulgating. His theory is, that

the climate of every country is constantly and regularly changing from its greatest degree of cold, to its greatest degree of heat, and then, from heat to cold again. Each progression, Mr. Locke conceives, occupies about 333 years, and our own climate, since the year 1791, the period of maximum cold, has been gradually getting milder, whilst during the same time, the climate of Europe has been undergoing an opposite change; thus, Mr. Locke asserts, that the United States will soon possess, as he declares they formerly did, the verdure of the vine clad hills of France, whilst France will again be bound in the icy chains of ancient Gaul. This variation in climate, Mr. Locke thinks, is attributable to the same cause that produces the variation in the magnetic needle.

The fact of regular and gradual variation in climate, for which Mr. Locke attempts to account, is said to be fully established by a reference to history.

SCOURS IN CALVES.

We have never found any remedy for the scours preferable to boiled skimmed milk. This should be given warm, and it is more safe than poisons of any kind.

TO PROTECT FRUIT FROM LATE SPRING FROST.

The following article appeared in the "American Farmer" last spring, and attracted our attention on account of its novelty and ingenuity. Since that period, we have seen a gentleman who assured us he had tried the preventive recommended with the most entire success. It is at least curious, and for the preservation of the fruit of a particular and favorite tree, might be esteemed useful.

"Many expedients have been resorted to for the protection of fruit from the blighting influence of late frosts. Throwing a sheet over the tree, hanging iron upon it, kindling a fire under it, &c. have each been found to have a beneficial influence, but none have been more efficient than the experiment which I am about to describe.

"My friend, Major Ruff, who is a virtuoso, lately informed me that many years ago he saw it stated in a French paper that by throwing a hempen rope over the top of a fruit tree, when in bloom or near the time of blooming, and by letting its lower end touch the ground, the tree would thus be protected from the influence of frost. This I thought quite rational and philosophic, I accordingly made the experiment — To prove more fully the *modus operandi* I took two dishes half filled with water, and set them a few feet distant, under the tree, on the night before an expected frost, the tree being nearly in full bloom. Throwing the rope over the top of the tree I let the other end hang in the water of one of the dishes—the event proved the correctness of the theory. There was a hard frost on the morning of the 27th instant and the dish into which the rope was deposited, contained ice of the thickness of a dollar, while that in the other dish was scarcely of the thickness of paper.

"The philosophy of the above experiment is this: the rope, which was previously wetted, was a conductor of heat; the air, and of course the limbs of the tree, became *colder* in the night than the earth—the rope conducted the heat from the earth to the tree, thus keeping up an equilibrium and preserving the tree from frost.

"As far as my observation extends, the critical time for fruit is long before it is in blossom; but it is nevertheless true, that severe and protracted cold at that time, or even later, will destroy the fruit. This was the case last year. The fruit was killed by severe frost after it had been formed.

"There is not in my mind a doubt that by attaching a rope to each tree of choice fruit, and thus letting it permanently remain through the winter and spring, that the fruit would be secured from the effects of frost.

"To the incredulous and the supercilious, who balance their grist all their lives with a big stone—who, sufficiently wise, despise knowledge and instruction, the above may appear unworthy their attention. Let such be informed that it is not less philosophic than lightning rods attached to buildings to protect them from the influence of electricity—let them be informed that

> "There are more things in heaven and earth
> Than their philosophy has ever dreamed of."

W. L. HORTON."

Woodlawn, Hartford Co., March 29, 1842.

TO MAKE PERMANENT MARKING INK.

Take six and a quarter cents worth of lunar caustic, and, having put it in an ounce vial filled with vinegar, cork it tight and hang it in the sun. In a couple of days it will be fit for use.

To make the preparation for the above, take a lump of pearlash the size of a chesnut and dissolve it in a gill of rainwater.

The part of the muslin which is to be written upon is to be wet with the preparation, and dried and glazed with a warm flatiron: immediately after which it is ready for marking.

A little vinegar in which a rusty nail has re-

mained for a few days, makes a mark on linen which is not easily obliterated—forming what is commonly called iron-mould.

Louisville Journal.

CORN.

A writer in the New Genesee Farmer states, that, "when David Thomas travelled through Indiana in 1818, he visited a prairie near Vincennes, on which a luxuriant crop of Indian corn had grown for more than sixty years in succession, without the aid of any kind of manure." The writer suggests that this continued product was probably owing to the existence of some mineral substance in the soil, and seems to think a similar effect could be produced by a continued and bountiful supply of wood ashes.

We know that the greatest product of corn we ever saw, we obtained from a square in a garden, by planting three feet every way, four stalks to the hill, and making free use of wood ashes, which we imagined might counteract the tendency to "fire." The season, however, was not a dry one, but still we always thought the corn was much greener, and fresher, and fuller, than it would have been, under the same planting, without the ashes.

BRINE.

One of our citizens, a grocer, informs us that he has for a few years past been in the habit of emptying the brine from his pork and fish barrels on his asparagus bed; and he thinks none of his neighbors have better asparagus than he. The effect of the brine is entirely to destroy the weeds, while it makes his plants much more thrifty. And why is not this reasonable? Asparagus is known to be a marine plant, and is found in abundance in many places along the shore of the ocean.—*Ed. Farmers' Gazette.*

For the Southern Planter.

IMPROVEMENT OF VIRGINIA.

The lands of Virginia are *slowly* improving, but this snail's trot does not suit me, who am restless in disposition, and earnestly desirous of seeing again ere I die, this my own, my native land, the first in the Union. Can it not be done in twenty-five years? Fie on the lubbard who says it cannot, and I hope to live yet twenty-five years, and fie on him who is not willing and ready to assist in making the effort. Considering land and climate, Virginia was once equal to any part of the Union, and if I live and retain my senses yet twenty-five years, that portion which I claim as my own, although a few years past it was generally barren, galled and gullied, shall be more productive than when first reclaimed from nature. Now, reader, are you satisfied to lie down and jingle your dollars, which your children may spend in a few months, or are you desirous of giving them rich *lands* instead of rich *purses*? If you are for the first, I have nothing more to do with you, but if for the last, then am I ready to go hand in hand with you in the attempt; and without the effort nothing can be done. Indeed, my worthy fellow, let me tell you that for several years I have been making some experiments in the way of improving my lands, and these having generally been to my satisfaction, I am emboldened to proceed on a larger scale.

What then is the first thing to be done?—Read. What second? Reflect. What third? Act. By reading, we acquire that knowledge which others possess, without which we would be but as savages; by reflection, we are qualified to judge of true or false positions, and to act; and by judicious action, we prosper. Improvement, is my motto, and I contend that lack of improvement, is, as it were, standing still, and standing still is equivalent to doing nothing. We read in the sacred Book "that he who does not provide for his own household is worse than an infidel?" Now what kind of provision is this spoken of? Is it money? Certainly not. Is it bread? Surely it is—and I would ask any one how bread can be provided from poor land? "Oh, but," says one, "when my land has become poor, I will move to the West." And when you have made that poor, where then?—to the moon, I suppose. But reader I beg your pardon, for my object is not to quarrel with you, but to convince you that the true and proper policy is, to improve the soil and the mind, and let the dollars be the last thing to be estimated. The dollars are merely representatives of things, and if you have the things themselves what do you want with the representatives? Only give me a plenty of rich land, whereon I can grow enough to eat, and enough to wear, and you may have all the *dollars*, and welcome. And how doubly delightful the employment of improving the soil and the mind; for be it remembered, that whilst improving the soil, the mind is improved also, and thus they act and react on each other, till,—I had like to have said, perfection is attained.

As I have so highly recommended reading, perhaps one may ask, what books and periodicals? Liebig's Agricultural Chemistry is first in the list, then I suppose you take the "Southern Planter," to which you may add as many as you like.

I verily believe from what I have seen and learned, that the mulatto soils, and ferruginous earths, of any color whatever, of Virginia, are

as susceptible of improvement as any land on the face of the earth. I verily believe that there are natural deposites of manure in Virginia fully sufficient to make all the arable lands in the State rich; and I verily believe that the time will come, sooner or later, when Virginia will be the Eden of North America. Marl, lime, gypsum, charcoal, rotten wood, ashes, and other matters of minor importance must do all for the agriculture of Virginia, that could be desired.

I had often thought of trying charcoal on my land, but neglected it till I read Liebig's Agricultural Chemistry. I am now engaged in burning coal, and shall burn one thousand or more bushels this winter, which will be pounded fine and spread on clayey land, at the rate of about two hundred bushels the acre. I have no pine, which Liebig says is best, therefore, I burn chesnut, which with me is abundant, and if my first experiment proves satisfactory, I intend hereafter to burn several thousand bushels, annually. The burned earth, and offal coal about the pits, are both moved so soon as cool, and spread on the land. See Liebig's Agricultural Chemistry, third edition, page 79, 80, 104, 207, 250, 365.

I lately informed the Editors of the Southern Planter, that I intended to use charcoal in connection with animal flesh, but whereas the *coal* would have a tendency to stay the putrefaction of the flesh, I have not used it; but made the layers, rotten wood, flesh, ashes, earth, rotten wood, &c. The flesh lately used is six sheep, killed to keep them from dying; and to day, I had about four hundred pounds of the offal of wool from a carding machine, spread in the stead of flesh; which I have no doubt is fully equal in virtue to the carcass of a dead horse; and we are informed that such a carcass is sufficient to decompose twenty tons of peat earth, and transfer it into the most enriching manure. See L. A. C. page 259.

ZA. DRUMMOND.

Amherst, Dec. 20, 1842.

In this communication breathes the true spirit of agricultural improvement. From what we have learned of him, we have formed a very high estimate of the vigor, zeal, and energy of Mr. DRUMMOND, and, if ever the opportunity offers, we shall be most happy to make the personal acquaintance of a gentleman, to whom the agricultural community in general, and we in particular, stand so largely indebted.

For the Southern Planter.

FOUNDER.

Messrs. Editors,—I lately had occasion to try a recipe published in your valuable periodical, with the most complete success. Not long since, my barouche horse being badly foundered, I had holes dug in the ground, nearly knee deep, and filled with water; the water was then heated with hot stones, and the horse lead into it, where he was kept for two or three hours. At the same time, I had him well bathed up to his shoulders and hips with hot water, and then rubbed dry. On the second morning, he started on a journey of two hundred miles, which he performed without any apparent inconvenience at all.

Your obedient servant,

W. H. DUPUY.

Cœlebs, Pittsylvania.

If we can procure any more of the grass roots referred to in the first part of Mr. Dupuy's letter, we will forward them with pleasure.

For the Southern Planter.

Messrs. Editors,—I am a reader of the Southern Planter, and am often amused, and I hope much benefitted, by many very interesting communications, and though I do not know that my opinion is worth anything, yet I think it is due to you to say I think it a most interesting and valuable periodical, especially to such persons as will be judicious in their selection of subjects for experiments, taking care not to make them upon too large a scale. I am not much in the habit of newspaper writing, and am no farmer or planter, and hardly any thing else, yet will I try, in my plain manner, to state some facts, of which I have become possessed from many years' experience and close observation, in reference to feeding or managing stock hogs; I mean such as range in the forest or large pastures. It is a very common practice with many persons to call their hogs up in the morning, by or before day, and give them a small allowance, depending upon their rooting or grazing for the balance of their support. Some give another allowance at night. The best plan is, to give the entire allowance at night. When called up early, (especially in cold weather) before they otherwise would stir, they become chilled and receiving a small allowance, it stays the appetite or cravings of nature, and they return again to their beds, or seek some sunny spot and lie down, where they often remain (hog-like without thought) until ten, twelve, and sometimes three o'clock in the day; they then have but little time to seek a supply of food by grazing or rooting; when night comes on, they again lie down hungry, empty and cold, and are climbing upon each other and squealing during the night, without rest, and if by chance there be any small ones in the number, their complaints (if they happen to be at bottom) are disregarded and they fare badly. If not called up in the

morning, they take their natural rest; then urged out by hunger as soon as the sun is up, they travel and labor hard all day, taking a much wider range, and as they are formed for rooting, perhaps roots may act as a medicine for them, as I have never known wild or forest hogs die by eating mushrooms. By night, they are pretty well supplied; then being called up and receiving their allowance, in addition, they lie down contented, and lying together and still, sleep warm, aided by the additional warmth naturally derived from food. It is well known, hogs fatten best when still, and in warm weather. It is my opinion, that one ear of corn, each, to hogs at night, with a tolerable chance to range the forest or graze in pasture, is equal to two in the morning, or one at night and one in the morning. Such has been my experience for nearly forty years, and I have often imparted it to my acquaintances, who have adopted the plan, much to their advantage, as many have told me. Hogs raised about a mill, should be treated in the same way, saving all the sweepings until night, and they will go off in the morning and cease to be troublesome. I think it injudicious to raise any pigs that come between 1st September and 1st March. I know it is said hogs fed at night are more apt to ramble and be lost. That is a mistake; be punctual to your hogs and they will meet you at the time to receive their allowance, and if it is given at night, they will sleep near where they are fed; if fed in the morning, after taking their morning's nap, they ramble until night overtakes them, and having no inducement to return, they lie down to rest, and in the morning, are out of hearing, being too cold to rise early; if they return at all, it is after the time of feeding, and they perhaps miss their allowance.

W. TIMBERLAKE.

Family Mills, Albemarle, Dec. 21, 1842.

We understand that Mr. Timberlake is an old miller, of great experience and reputation for his management of hogs.

BEESWAX.

The neatest way, says the Farmers' Cabinet, to separate beeswax from the comb, is, to tie it up in a linen or woollen cloth or bag with a pebble or two to keep it from floating; place it in a kettle of cold water, which hang over the fire; as the water heats, the wax melts and rises to the surface, while all the impurities remain in the bag.

For the Southern Planter.

DURHAM CATTLE AND BERKSHIRE PIGS.

Messrs. Editors,—If in this age of improvement in *stock* and all the apparatus of farming it be not absurd to revert to the virtues of stock of the olden time, I should like to call up the memory of "*Bergami,*" that justice may be done his family, and that his descendants wherever found may be properly appreciated. "Bergami" was a Teeswater bull, sent to Virginia by John S. Skinner, Esq. about the year 1823, *when your correspondent was a little boy.* The late Henry S. Turner, Esq. of Jefferson county, purchased him and bred from him for a number of years upon selected cows from the South Branch, by which he greatly improved his breed of cattle in the requisites of that valuable race. "Bergami" subsequently came to this county, where he sojourned for a few years, dispensing his favors most liberally amongst our cow-pens, and was a few years ago, when advanced in life, carried hence to the *far west,* leaving behind him not only a most enviable reputation, but a most numerous progeny to attest it. Such is the estimate in which his race is held now by those who have tried it that it would indeed be difficult to find one who would be willing to admit that the "Improved Durham Short Horns," valuable as they are, are in any essential superior to the descendants of "Bergami." I have myself a cow, now ten years old next grass, whose dam and grandam were both by "Bergami." She herself was by Meade's Durham Short Horn, "Frederick." She has brought me ten calves, having had twins twice—is among the most abundant milkers I ever saw and has never been *dry but once* since she brought her first calf. In color she follows her Short Horn ancestry (being white, with some little mixture of red)—in weight, fine bone, round barrel, long frame, deep chine, &c. &c. She exhibits the leading characteristics of the Bergami race. I have seen many other cows of this particular breed of cattle, but have yet to lay my eyes on one of them that is not above mediocrity, most of them would compare favorably with the latest and most fashionable importations of British cattle.

Now, Messrs. Editors, I will leave my cow, *Io,* to her *ruminations* awhile, and give in, in as few words as possible, my experience of *Berkshire pigs.* I have given them a fair trial, and find that the cross upon our common hog is a *decided* improvement, but not sufficient to justify by any means the exorbitant prices that are paid for them. I have sold some of the *young* pigs at ten dollars ahead but have not been able to get that price for any of them when grown and fatted. I have no disposition to ridicule either the *raisers* or *praisers* of Berkshires, nor yet the hogs themselves. Were I to attempt that, every *grunter* I have would *curl his tail* at me—for I have no other kind—but the truth I will tell about them, and the whole truth. 'Tis true "they live on less than any hogs in the world," and, therefore, I think it a pity to *kill* them. 'Tis true that "they come to maturity early," and 'tis equally true that they rarely

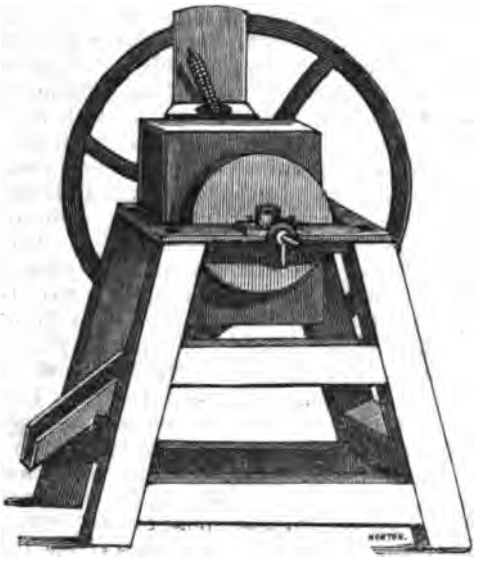
overgrow themselves. I am done buying them at ten dollars ahead. Parson Turner may get all he can for his, but in future I will sell my full blooded pigs for five dollars ahead—buy common *shotes* at two dollars, and lay out the balance of the pig money in corn to feed them on, and that will make bacon good enough for me if well cured,* and cheap *at that*.

A LOUDOUN SUBSCRIBER.

Middleburg, Loudoun, Jan. 11, 1843.

* Some of these days I'll show you how to do it.

HUSSEY'S CORN AND COB CRUSHER.



The public have become satisfied, at last, that in throwing away the cob of the Indian corn, they have been wasting very good feed. The experiments of Mr. Peter Minor, of Albemarle, which have been detailed over and over again, and the testimonials daily published in the agricultural journals, of the nourishment and beneficial effects of cob meal, have awakened a very general interest in the subject. We have often expressed the opinion, which we take this occasion to repeat, that the farmer wants nothing more than a good, cheap, and simple horse-power, to induce him to apply it to many operations at home, that are now, either totally neglected, or performed abroad, at the expense of much cost and more trouble. Amongst the chief of these we reckon the grinding not only corn and cob for stock feed, but the grinding of corn meal for human consumption. Every farmer who has to send five or six miles to mill, knows, that the toll is the smallest portion of the expense of grinding; and the greatest difficulty in persuading our farmers to do what, under almost any circumstances, their interest would dictate, that is, to grind all the grain they feed away, arises from the trouble and inconvenience of "sending to mill." For this reason, we have been asked, over and over again, by persons living within five miles or less of a public mill, "can you not find or construct us an implement with which we can grind our own corn?" With the increased desire to grind the corn and cob together for all the stock, this demand has greatly increased. To answer this demand, various machines have been gotten up; there are HUSSEY'S, BALDWIN'S, MURRAY'S, and BIRELY'S, that we have seen. We have not, however, had sufficient opportunity to examine and test them, to enable us to compare them, or speak of their respective merits. Of Mr. HUSSEY'S, of which the engraving is a representation, we have received and worked one or two, and we

confess ourselves highly pleased with its construction and performance. It is as naked and simple as possible; from which are derived the three advantages, of engendering but little friction, being easily kept in order, and being furnished cheap. It occupies a space of about three feet square, and weighs, we should guess, about three hundred pounds. Upon a horizontal shaft, is placed a cast iron grooved plate, armed also with steel cutters, which works against another plate, which is stationary, being screwed to cast iron projections fastened to the frame. Both of these plates, with the cutters affixed, may be displaced and substituted by new ones, by the mere turning of two or three screws. The extra plates are furnished at a dollar and a half a pair. By means of a screw, shown in the front part of the engraving, the plate affixed to the shaft, may be made to approach or recede from the stationary plate, at pleasure; so that, in a few turns, you change the grinding from the finest meal, to the coarsest hominy.

In answer to our inquiries as to the wear of the plates and efficiency of the machine, Mr. Hussey says, that he has had no opportunity yet of testing the wear of the plates, the machine having been in use only about a year.—"With the ordinary horse-power used in threshing wheat, it will," he says, "grind from eight to ten bushels per hour of dry corn; if the corn be damp, it will make quite a difference in the quantity, although the meal will be equally good."

The machine is intended for *horse-power*, and has a whirl on the shaft of such a size as will give it the proper motion when driven directly from the drum which drives an ordinary threshing machine. It is also fitted with a crank and handle, and although it is tolerably hard work, two men, by spelling each other, can, of a rainy day especially, do very respectable work with it. It is fed through a tube or hopper, ear at a time, and requires the constant attendance of a feeder, although his task is an easy one.

This machine, although it is sold for less, we believe, than any other constructed for the same purpose, bore away the palm and received the first premium at the agricultural fair at Albany last spring.

We will keep a supply of them which we will deliver at our wareroom, in Richmond, for $37 apiece.

NEW FABRIC FOR SERVANTS' CLOTHING.

Mr. Chase, of Baltimore, has invented a hand machine for carding and spinning wool. It also wraps one or more threads of cotton with the wool. The only two machines of this kind he has made, are now in use on the plantations of George Kelso, Esq. of Louisiana. Mr. C. exhibited to us some linsey manufactured by Mr. Kelso's negroes, which is an excellent and very singular fabric. The chain is of cotton, and the filling consists of three threads of cotton wrapped with wool. The cloth combines strength with warmth and cheapness. Mr. K. uses McIntyre's spinning machine to prepare the cotton. Mr. Chase says that a number of his spinning machines have been ordered by the cotton planters. Very excellent blankets may be prepared by wrapping the warp and filling with wool.

Louisville Journal.

M'CORMICK'S REAPER.

As we have received a great many inquiries about M'Cormick's Reaper since we published our last number, and as they are pretty much embodied in the following, from Mr. Smith, we will undertake to answer them all, as well as we can, through the columns of the Planter. Mr. Smith asks,

"First. Will the wheat cutter answer upon land smartly undulating, or upon flat land bedded—the beds eighteen feet wide—or upon the same kind of land simply drained by water furrows ten or twelve feet apart?

"Second. Will the cutter operate well when the straw is damp from dew or rain?

"Third. Can the cutter be easily drawn by two horses, when the land is wet?

"Fourth. Can the cutter be conveniently used unless the wheat ripens in large bodies? And,

"Fifthly. What will be its probable last?

GEO. A. SMITH.

Orange C. H., Va."

1st. The width of the machine is about seven feet, and where there are no very great inequalities within that space, it will operate without difficulty. Upon hill sides that are tolerably level, and not too steep, we understand it works well.

2d. We have the authority of one gentleman, Dr. BRAXTON, for saying, that during the last harvest, which was a very wet one, he cut a great deal of his crop immediately after heavy rains, and found the dampness of the straw to offer little or no obstruction to the operation of the machine.

3d. When the ground is dry, two horses work the Reaper with perfect ease, when it is wet, the wheels sink and make the work much harder, requiring sometimes the assistance of a third horse. But for the coming harvest, the width of the wheels will be increased, by which, it is supposed, the sinking will be avoided.

4th. The term "large" is a very indefinite one; it is certain that a very small crop would not justify the expense of the machine, but knowing what it will do, every one can judge for himself whether it would be to his interest to have it.

5th. As to the probable last, if well taken care of, we see nothing about it liable to wear out in twenty years, if applied only to the crops of a single farmer.

It must be understood, however, that we have never seen the machine, and that all the knowledge we have concerning it, is derived from the information of others, and from a personal inspection of the model.

RICE.

It is said rice was first planted in Carolina, in 1668; but owing to bad seed it was abandoned. In the year 1695, a vessel from Madagascar, the master of which furnished a gentleman with a small quantity, from which has sprung immense sources of wealth to the southern States. "So much for a remnant of a sea store left in the bottom of a bag."—*Nashville Agriculturist.*

THE POET AND THE BASKET MAKER.

I am no enemy to learning—no enemy to colleges. On the contrary, I am the steadfast friend of both. But I am opposed to having them both overrated as they are; and the advantages of both so abundantly exaggerated, by the great mass of our people—as if no other learning were valuable, no other knowledge worth having.

I would remind them of the basket maker; the only man of a large crew, cast ashore among savages, who was able to turn his past acquisition to account; while the remainder sat twirling their thumbs, liable every moment to be knocked in the head for their ignorance, the basket maker was made a chief upon the spot; and almost worshipped for his ingenuity.

Or I might remind them of that other crew taken by a Barbary corsair. When they were before the Dey, he inquired their several occupations. The riggers, and blacksmiths, and carpenters were all sent off to the dock yard.—The sailors had a comfortable berth provided for them, and even the officers were turned to account one way or another. At last his highness came to a literary man—a passenger and poet—what to do with him, for a long while, his highness could not say, till at last, on learning that the prisoner was a man of sedentary occupations, and having them explained by the interpreter, he ordered the poet a pair of feather breeches and set him to hatching chickens.

And now which of these two was the educated man, the poet or the basket maker?

John Neal.

THE GOOCHLAND AGRICULTURAL SOCIETY.

Four or five weeks ago, we received through the Secretary, a report of the agricultural fair in Goochland, and a copy of the address delivered by their able President, Dr. WIGHT. By request, we left them at the office of one of our city papers, where they were unfortunately mislaid, and it was not until to-day that we were enabled to regain them. We regret this delay particularly, because, an examination of the address satisfied us that it more than sustained the high reputation for science and practice that Dr. Wight has acquired in the circle where his merits as a farmer are known. We shall probably draw largely on it in our next.

REBELLIOUS HENS.

A neighbor of our's states that hog's lard is the best thing he can find to mix with the dough he gives to his hens. He says one cut of this fat, as large as a walnut, will set a hen to laying immediately after she has been broken up from her setting; and thus his hens lay through the whole winter. Will some more experimenters try the virtue of hog's lard.—*Massachusetts Ploughman.*

From the Central New York Farmer.

CUTTING FEED FOR CATTLE.

Messrs. Editors,—My location is among the mountains in the southern part of the State of New York, but my exact whereabouts it is not proper at present to define. The result of my reflections will, from time to time be forwarded for publication, and as I sometimes emerge from my hiding place, I shall tell of some of the faults, as well as the merits of the farmers where I travel. In this communication, I shall touch upon some of the errors which prevail to a considerable extent, not only in my neighborhood, but in nearly every part of the country. The first error which I shall name is the wasteful manner of feeding stock which too generally

prevails. It may be assumed as a safe calculation, that at least one-fourth of the fodder may be saved by the use of the straw-cutter; and yet, how few of these machines are in use. But as arguments rather than mere assertions will be expected, we will enter into an estimate, for the purpose of showing the actual saving in dollars and cents; for this, after all, is one of the great objects of the farmer. Let us suppose, then, that a farmer has thirty head of cattle, which at a moderate estimate, will consume one and a half tons of hay each. Judge Buel and others, who have given the experiment a fair trial, estimate a saving of one-third, or half a ton to each cow in one winter. But for fear of being considered extravagant, I will suppose that eleven and one-fourth tons, or one-fourth, would be saved by the use of the machine.—Eleven and one-fourth tons of hay at six dollars per ton, which would perhaps be less than the average price for a term of years, amount to sixty-seven and one-half dollars. The extra labor in taking care of the stock would be worth, say thirty dollars, which, deducted from sixty-seven and one-half, leaves thirty-seven and one-half, a sum sufficient to pay for two good machines. With this view of the subject, then, it will be seen that in a course of years, a considerable saving would be made; but this is the most unfavorable view which can be taken of this subject. Hay in many parts of the country will average ten dollars per ton, and is frequently worth that price in nearly every part of the State. It is, however, in feeding straw and corn stalks, that the greatest saving is effected by cutting, and so great is my confidence in the propriety of this method of preparing coarse fodder for stock, that it is my firm conviction, that it would be better for any farmer who has not the means at command, to sell a sufficient quantity of fodder to pay for the machine and extra labor, than to feed in the old-fashioned and slovenly method, without cutting. Every farmer knows that in feeding stalks whole, about one-half of the value of the fodder is wasted, while stalks properly cut with a machine, will be entirely consumed.

Straw properly cut, may be mixed with hay or stalks, when the necessity or the convenience of the farmer may require it, and will be more readily eaten by cattle than when fed whole; for every farmer has found some difficulty in making cattle eat straw, in any considerable quantity, unless, (as is the practice with some,) a considerable quantity of grain is left in the straw. Taking into view all these advantages, it appears to me that the saving in the winter's keeping of a cow, cannot be less than half a ton of hay, which in the stock of thirty cows, would make a saving of fifteen tons, or ninety dollars, from which deduct thirty dollars for extra labor, and we have a saving of sixty dollars for the use of the machine in a single winter. There is, however, another point which ought not to be overlooked, and which is second in importance to no other branch of agriculture. Instead of selling the fodder which would be saved in the way we have pointed out, the farmer may keep a greater number of cattle, and consequently, the quantity of manure will be so increased, as to aid materially in the renovation of the soil. This cannot fail to have its proper weight with every calculating farmer. But as I may hereafter touch upon the subject of manures, it is proper to abstain from a discussion of this branch of agriculture.

A MOUNTAINEER.

REPORT OF THE VIRGINIA BOARD OF AGRICULTURE.

We are indebted to the politeness of the Public Printer for a copy of this valuable document. We have no space for extracts, hardly for comments in this number, but this we will say, that the practical character of the report will recommend the Board from which it emanates to the regard of the agricultural community, and will put to shame those gentlemen of the Legislature who could with difficulty be brought to vote for the printing of 1,500 copies of a document which they ought to have taken pride and pleasure in placing in the hands of every farmer in Virginia.

REMEDY FOR COLIC IN HORSES.

Take two quarts of cold water in a hand basin, add with your fire-shovel say a pint of hot wood ashes or embers, and stir. Cut off an inch and a half from a common hand of tobacco and shred in the mixture—stir all up and let it stand fifteen minutes and settle. Pour off a common black bottle full of the fluid and drench your horse—in half an hour he will be well.

Rationale.—The gas which bloats the horse is probably carbonic acid gas and light-carburetted hydrogen, the product of the vegetable decomposition which is going on in the intestines—at any rate it is a gas which is immediately absorbed by its combination with an alkali. The tobacco is a powerful anti-spasmodic and cathartic—it, therefore, prostrates the nervous sensibility, checks the inflammation and increases the action of the lower intestines. In a critical or extreme case it will be well to give an enema of a strong decoction of tobacco with a common syringe. Out of more than one hundred instances in which I have seen this remedy used, I have yet to witness the first failure. It also has an advantage over very many remedies, viz: it cannot injure a horse in perfect health. Feed light for a day or two.

Causes of Colic.—The main cause consists in the presence of a greater amount of food than the intestines can elaborate into nutriment, or of a kind of food difficult of digestion, producing spasm, obstruction, vegetable decomposition and consequent inflammation. *Hard driving on a full stomach* will produce colic, because the effort weakens the tone of the digestive powers and they cannot elaborate the food—which then produces irritation and inflammation. *Cold water when the horse is heated*, because it is a powerful stimulus and will produce spasm or obstruction, or by the re-action produces weakness of the digestive organs. It also gives too much fluidity to the food—fluids are more difficult of digestion than solids. It also increases the fermentation. *Hearty feeding after hard driving*, because the stomach and intestines sympathize with the general fatigue of the system and are easily overloaded, and the appetite will induce the horse to eat more than he can digest.

Colic is first flatulent, then inflammatory. In the flatulent stage, or in what is called belly-ache, aromatic remedies or half a gill of spirits of turpentine, or a pint of whiskey and black pepper may be given; all these stimulate the system and may assist it in overcoming the difficulty. But in the latter and inflammatory stage, which rapidly succeeds the former, these same remedies would produce speedy death by increasing the inflammation. In nine cases out of ten, this disease is not observed by the ordinary driver until it has assumed the inflammatory form—in which stage the remedy at the head of this article should be given with as little delay as possible; although it should not be omitted even if the horse be supposed to be in the article of death itself—for I have seen them recover when every by-stander had dismissed all hope.

Yours truly, T. N. Wellies.

French Creek, Peoria Co., Nov. 25, 1842.

P. S.—*Change of feed* will sometimes produce colic, for the reason that the digestive organs do not readily adapt themselves to it—and the food lies there in its unchanged state, producing by heat and moisture, fermentation, irritation and inflammation.

Colic produced by oats is not as obstinate as that produced by corn. T. N. W.

THRESHING SEED GRAIN.

"It has gone the rounds of the papers, on the authority of the New Genesee Farmer, that the use of threshing machines in getting out grain, will prevent a large part of it from vegetating. Several farmers who have made careful observations tell us, that new machines, before the edges of the teeth are worn smooth, will destroy the vital principle of many kernels, but that old machines will not injure seed grain more than the flail."

The use of the threshing machine is universal in Virginia, but we never heard of any injury resulting to the grain. There are, however, many varieties of the machine, and some may so break the grain as to destroy its vegetating properties, but if so, whether old or new, it should be discarded at once.

CONTENTS OF NO. II.

Tobacco—Of the cutting, curing and housing, p. 25.
Clay Soils—Proper mode of treating, p. 27.
Barns—A description of Mr. Seely's on Staten Island, p. 27.
Windmills—Information requested, p. 28.
Sausages—Recipe for making Oxford sausages, p. 28.
Cultivator—New and improved form of, with a cut, p. 29.
Charcoal—Nutritive qualities of, p. 29.
American Meat—Its introduction into the English market, p. 30.
Horse-Power—Proper mode of constructing, p. 30.
Dogs—To cure distemper, p. 31.
Corn—Should be sowed for hay, p. 32.
Stables—Management of, p. 32.
Manure—Should be kept under cover, p. 32.
Communications—Character of those desired for the Planter, p. 33.
Bread—Recipe for making, p. 33.
Sheep—Remedy for foot-rot, p. 33.
Seed Grain—The most nutritive not the best for seed, p. 33.
Corn—Mr. Young's mode of cultivation, p. 34.
Potatoes—Modes of cultivation, p. 35.
Urine—Its great value as manure, p. 35.
Corn Fork—Description of Mr. Shriver's, with a cut, p. 36.
Stays—Absurdity of, p. 37.
Ruta Baga—Account of Mr. Bement's crop with his mode of cultivation, p. 37.
Peaches—To secure a crop, p. 38.
Seasoned Wood—Importance of seasoning fire-wood, p. 39.
Machinery—Value of labor-saving machinery, p. 39.
Cattle—Proper mode of driving, p. 39.
Climate—New theory of, p. 39.
Calves—To cure the scours, p. 40.
Frost—Ingenious method of protecting fruit trees from frost, p. 40.
Ink—To make marking ink, p. 40.
Corn—Successive crops for sixty years, p. 41.
Asparagus—Value of brine applied to asparagus, p. 41.
Virginia Agriculture—Improvement of, advocated by Mr. Za. Drummond, p. 41.
Founder—Value of a former recipe confirmed, p. 42.
Hogs—Proper treatment of forest or grazing hogs, p. 42.
Beeswax—Recipe for preparing, p. 43.
Durhams and Berkshires—Essay on, p. 43.
Corn and Cob Crusher—Mr. Hussey's described, with a cut, p. 44.
Clothing—New fabric for negro clothing, p. 45.
M'Cormick's Reaper—Inquiries concerning, answered, p. 45.
Rice—Its introduction into America, p. 46.
Education—Other sources of information besides reading, p. 46.
Hens—To make them lay, p. 46.
Feed for Stock—Value of passing all long food through the cutting box, p. 46.
Virginia Board of Agriculture—Their report to the Legislature, p. 47.
Colic in Horses—Recipe for, p. 47.
Threshing Machines—Supposed to injure vegetating properties of grain, p. 48.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. III. RICHMOND, MARCH, 1843. No. 3.

TOBACCO.

(Continued from page 26.)

Of Stripping and Prizing.

Stripping is begun as soon after the plants are thoroughly cured and seasoned, as the convenience of the planter will permit. It is taken off the sticks in proper season or order, and packed in a large bulk for this purpose, and generally in higher order than is proper for prizing, which enables the strippers to handle it with less waste, and to tie it more neatly. There are two facts generally believed to exist, in relation to the order of tobacco, which are unaccountable. One is, that tobacco *in order*, or in a moist state, is no heavier than when dry. The other, that if it is taken down and bulked, as it is going out of season, that is, as it is passing from a moist to a dryer state, it will return in the bulk to the highest state of order it had previously acquired. These opinions, however, seem to have been established more by prescription than recent experiment, for I can find no person that will absolutely assert the facts upon his own experience. But be it as it may, the latter fact is so generally believed as to be attended to in bulking tobacco.

In stripping, the best planters make two qualities besides stemmed. For this purpose, every plant passes through the hands of the sorters, (the most experienced and judicious of the laborers,) who pull off the two first, or ground leaves, without looking. Upon examination, the remainder of the plant may be found fit for the first class—perhaps two more leaves are to be taken off, or perhaps the whole is only fit for the second class. In this way, the first class is obtained, the leaves previously pulled off are again sorted for the second class, and what is unfit for this is stemmed.

No definite idea of the quality of the different classes can be well conveyed by description. It can only, and soon will be acquired by observation and experience. The bundles of each consist of four or five leaves neatly wrapped around the head with another leaf. The stemmed tobacco (about two-thirds of the stem only being taken out) is tied in large bundles, and when packed in the hogshead for pressing is untied and laid loosely, but in strait and uniform layers.

After stripping, some planters hang up their tobacco again upon sticks drawn smooth and somewhat to a feather-edge, and as it comes in proper order for prizing, it is taken down and bulked, and closely and effectually covered till the time of prizing arrives—the months of April and May are thought the best time for this.—Others pack their tobacco in double winrows, that is, lightly lap the tails of the bundles, placing the heads on the outside, and thus raise a bulk of three or four feet in height. It remains in this situation well weighted, but oftentimes without cover all the winter, and perhaps gets completely dry; but returns in proper order for prizing in the warm weather of April and May. It is a matter of much doubt and dispute, which of these two modes is the best. Perhaps the latter is to be preferred, because it is the least trouble, provided the planter has plenty of house room, and can so order it as to leave the winrows entirely free from interruption. Other planters more careless, carry on the operation of stripping and prizing together, without due regard to the order of the tobacco, which may account for the excess of inferior qualities, and diversity of prices exhibited in our markets.

Prizing is the last operation, but not the least important in the care and attention it requires. The size of our hogsheads are prescribed by law. They must not exceed four and a half feet in height, nor thirty-six inches in the diameter of the heads. In these we generally attempt to press 1,500 lbs. but we oftener fall below than go over it. The average is perhaps not more than 1,350 lbs. Our prizes are of the cheapest and simplest construction, generally fixed by the laborers who use them, and not exceeding two or three dollars in entire cost. The stump of a tree is generally used, instead of a post in the ground, until it rots, and the hogshead is protected by a temporary shed, or a light portable roof straddled across the beam. I subjoin a sketch of the one most commonly used. This you will observe operates by an unceasing suspended weight, capable of being increased by the addition of stones to any required extent, and which is suffered to settle gradually to the desired point, by which all danger of bruising from sudden and violent pressure is avoided.—The important points in prizing, are to pack the tobacco neatly, in straight and regular layers. This is best done by putting in only one bundle at a time, pressing and squeezing it closely

through the hands as it is done, to make it occupy less space, by which it will exhibit a better appearance when it is opened for inspection. To make it descend always on a level in the hogshead, by never suffering the beam to be depressed below a horizontal position, and to cause the tobacco in prizing, not to leave the inside of the hogshead, which can only be effected by having different sets of press boards, corresponding to the different dimensions of the hogshead between the bulge and the head.

Your friend, P. MINOR.

CORN-STALK SUGAR, POUDRETTE AND CINDERS.

To the Editors of the Southern Planter:

Gentlemen,—While looking carelessly over a political paper some time since, I accidentally came across an extract from some southern agricultural journal, relative to the subject of making sugar and molasses from the sap of *green corn-stalks*. Since reflecting upon it, I have a desire to try the experiment, merely for the sake of gratifying my curiosity. This little extract stated that the stalks were ground, but I should think "*beating*" them, in the manner of beating cider, would be a good substitute in a small way. If you have any knowledge on the subject please give us a piece in your next number of the Planter, showing the whole process.

The "*Poudrette*" has been discussed with considerable animation, in our county and I am glad to see you design affording us an opportunity of testing its value.

I tried an experiment last spring with the cinders from the charcoal of a blacksmith's shop, and was greatly surprised at its effects. I placed them upon a small *red* lot, which was put in tobacco, and could see the difference, to a row, between that and the stable manure. The tobacco was larger and heavier where the cinder was placed, than the other portion of the lot. I cannot attribute it to any strengthening quality in the cinder, but it must have changed the nature of the land, so as to adapt to the wet season we had during the whole summer. Do you think there could be any intrinsic worth in the cinder?

This is not written for publication, but merely to satisfy my own curiosity on the subjects alluded to. I hope the interest I take in farming will be a sufficient apology for troubling you. There is no subject which the people of Virginia should be more anxious to investigate than the SCIENCE of farming and planting, and no subject on which the laws of natural philosophy would act with a happier and more interesting effect.

Wishing your useful periodical an extensive circulation for the good it may do, and as a meed for the interest you take in the farmer's welfare,

I am your subscriber
And obedient servant,
C. BASKERVILLE.

Mecklenburg, Jan. 16, 1843.

We have taken the liberty of publishing what was "not meant for publication," and will, in the first place, assure our correspondent, that no apology is needed for "troubling" us upon any subject connected with agriculture.—It will always afford us pleasure to respond, to the best of our ability, to his inquiries, either publicly or privately.

We sincerely hope that the POUDRETTE will receive a fair trial in Virginia this year, not that it is, as some have ridiculously imagined, to take the place of farm yard manure, but after all has been raked and scraped from every hole and corner, then we belive it may be well eked out with Poudrette. In other words, we believe the farmer can make two or three hundred per cent. by manuring with Poudrette that portion of his land, that would, otherwise, go unmanured. Its effect upon garden vegetables is undoubted and most extraordinary.

The cinders from the blacksmith's shop, we have no doubt, were highly advantageous during the wet summer of the last year, in their action as mechanical receivers and dischargers of the gases obtained from the atmosphere, over and above the carbonic acid gas they may have assisted in forming.

With respect to the corn-stalk sugar, we have seen specimens of it equal to any we have ever beheld. Whether it can successfully compete in the market with that from the sugar cane, has yet to be settled, and is certainly worthy of trial. The following directions for its manufacture, furnished by Dr. NAUDAIN, of Delaware, are the most clear and precise that we have seen:

"The fact that sugar can be made from the stalk of corn is one of recent discovery. It has already excited a deep interest in the public mind, and every thing relating to it is looked for with much interest.

"The writer has become possessed of some facts which may materially aid others in the present experimental state of the business. For as yet it is experiment, although enough is known to convince the most sceptical that the probability is that sugar from Indian corn will be, at a future and not very distant day, one of the great staples of the country.

"Without further remark, then, it should be remembered that as much corn-stalk as possible should be grown. To do this, the corn should be planted as broom-corn is commonly planted—very close in the row, probably a stalk every three or four inches. The tillage will be the same as for broom-corn. When the young ears begin to appear it is necessary to pluck them off carefully, and to repeat the gathering as often as is necessary so as *to prevent the formation of any grain.* Because if grain be allowed to form, it takes all the sugar from the stalk.—About the time that corn begins to harden, the making of sugar should be begun. It is not necessary to say any thing about a proper mill to crush the stalk and separate the juice, because mills of the cheapest kinds only should be employed now, until the business would fully warrant an expensive outlay. It would probably be found that the common cider mill, with plain cylindrical nuts, would be quite sufficient for a farmer who would raise a fourth or half an acre of corn for sugar for his family, and this quantity would be quite sufficient for satisfactory experiment.

"When the juice is separated from the stalk, about a table spoonful of white wash made of the *best quick lime* and about the consistence of thick cream, should be added to each gallon of the juice, and then the boiling should commence. The scum that rises should be carefully removed; and the juice, if this process has been properly and carefully conducted, will be quite clear and nearly colorless. Then commences the process of evaporation; and when the juice has boiled down in about the proportion of eight gallons to one, the boiling will be completed, and it may be poured out into a shallow tight wooden box to grain.

"It has been ascertained, although as yet the reason is unknown, that if the juice be boiled in a deep vessel, like the common cooking vessels, sugar will seldom be obtained; while if it be done in a shallow vessel, so that the juice at the commencement of the boiling shall not be more than three to five inches deep, sugar would be obtained without difficulty. It has been ascertained also that the sugar from corn will not grain so readily as that from the sugar-cane.—And in some instances it has remained more than a week after the boiling before the sugar was formed, and yet excellent sugar made.

"It should be *particularly remembered* that the juice should be boiled *as soon as separated from the stalk.* It becomes acid very soon, and no sugar can be made if the juice be allowed to stand two or three hours before it is boiled. The juice will even spoil *in the stalk* before it is ground, if the stalk be cut off a few hours before grinding. It is necessary then that every part of the process should be done with the greatest despatch. The stalks should be brought to the mill as soon as cut, and ground immediately. The vessel for boiling ought to be properly filled in an hour, or at most two hour's grinding. And the process of boiling down should immediately commence and be continued until completed.

"Excellent syrup, superior to the best molasses, will be obtained by observing the above directions, and boiling five gallons of juice to one gallon.

"The juice of the corn-stalk is very rich in sugar when cultivated in the manner suggested. Tested by Beaume's sachrometer, the instrument used to measure the strength of syrups, the juice of the corn-stalk weighs 10 to 10½ degrees, which is about the weight of the juice of the best cane in the West Indies, and is richer than the juice of the cane in Louisiana, which is seldom heavier than 8½ degrees.

"One gallon of juice will produce nearly 1¼ pounds of sugar; and an acre of good corn will yield, if carefully expressed, from 700 to 1,000 gallons of juice."

From the Farmers' Cabinet.

HENS' EGGS.

I notice in the Farmers' Cabinet for 4th mo. last, page 275, an inquiry as to the truth of the assertion, that hens' eggs which are *round* produce female chickens, and those which are *long* or pointed, produce males.

When a boy, I was in a situation to be able to indulge my fondness for fowls, and often raised chickens;—without ever having heard of the above facts, I discovered that the eggs which approached the nearest to the roundness always produced females, and those which were pointed at one end always produced males—I acted accordingly, and always succeeded in obtaining females or males according as I wished.

After a lapse of a number of years, being in Philadelphia market, I happened to mention the fact to one who raised chickens for sale, and who preferred the males, because they grew larger—the information was received with some surprise; but I advised the person to try it, and afterwards was informed of the entire success of the experiment, all males being produced by selecting the long or pointed eggs.

I since find the fact was mentioned by a writer over two thousand years ago.

L. H.

GOOCHLAND FAIR.

We alluded in our last to the proceedings of the fall meeting of the Goochland Agricultural Society, a report of which was transmitted to us by the Secretary just after the emission of our December number, with a request that we

would hand it over to the daily papers of the city, that it might be published before the period for our next issue. We accordingly complied with this request, and, much to our regret, the paper was misplaced, and we never regained it until just as our February number was going to press.

Our limits will not admit a circumstantial detail of the proceedings of agricultural meetings, but we are always happy to receive their reports in full, because from them we are frequently able to extract matters of great interest to our readers. This meeting seems to have been one of peculiar interest, and it is not even yet too late to note some of its most prominent proceedings. For instance, we observe that the premium for the best cultivated farm was awarded to Mr. TARLTON FLEMING.

We have seen Mr. Fleming's farm more than once, and we think all that have had an opportunity of judging, will bear us out in saying, that the committee would probably have made the same award, if the whole Union, instead of the county of Goochland, had entered the lists. At any rate, we have never seen a farmer, at the North or the South, who excelled Mr. Fleming in the cleanness, neatness, and closeness of his cultivation. The second premium was awarded to Mr. JOHN M. VAUGHAN, and the third, to Mr. HENRY SHELBURN, "a poor man, who in early life had the misfortune to lose both his feet, and, with no other aid than a small boy, performed all the labor on his farm, which exhibited remarkable neatness and good management."

To Dr. William L. Wight was awarded the premium "for the best piece of cloth for men's winter wear." With this premium we were particularly pleased, because we go very far for the protection of domestic industry, and we believe the very best mode of encouraging home products, is the substitution of them, by individuals, for articles of foreign growth. We have said we carried the doctrine of "protection" very far; with farmers, especially, we would carry it to their own farms and their own firesides. If there is an exception on earth to the general rule of the value of a divison of labor, whereby one man devotes all his labor to one production, it is afforded by the peculiar nature and circumstances of the farmer's occupation. The changes of the seasons, the complicated nature of his pursuit, the isolated character of his situation, the necessary redundancy of labor, at the South, compel him to combine many divisions of labor, and no matter how tempting the cheapness of "manufactured" products may appear, we believe as a general rule, with very few exceptions, it is true, that he that makes most "within himself" and purchases least, is best off.

We were very happy to see that the ladies came in, not only for a large share of the premiums, but also of the compliments of the Society. To the latter, from what we ourselves once saw at a fair in Goochland, we know they were pre-eminently entitled.

We will now proceed to review

DR. WIGHT'S ADDRESS.

This is a very ingenious, scientific, and well written document. The Doctor after explaining the received theory of the parts performed by the soil, the atmosphere, and solar light, in the production of plants, lays great stress upon the value of the green ray, which is reflected. That plants are generally flourishing, when they look green, is what we all know, but to say that their vigor is owing to the reflection of the green ray, is no more reasonable, it seems to us, than to say that the reflection of the green ray is owing to the healthiness of the plant, which would be nothing more than to say, what has been familiar to every body for ages, that when a plant is healthy, it looks green. Again, why not say, that the vigor of the plant is owing to the absorption of the other six rays, rather than to the reflection of the green ray, which it rejects.

Lime, the Doctor urges, is beneficial to plants by enabling them to reflect the green ray to greater perfection; this he tested by growing plants in cotton, watered with rain water, holding more or less of carbonate of lime in solution. Those plants receiving the dissolved carbonate of lime, gave off, through their leaves, more oxygen, and reflected more strongly the green ray. That carbon is necessary to the growth of plants, analysis has proved long ago, that carbonic acid gas is absorbed by plants under certain circumstances, and that the carbon is appropriated and the oxygen given off, is well known, and that carbonate of lime, which is composed of carbon, oxygen, and lime, increases the vigor of plants, has been satisfactorily ascertained, and that the increased vigor will be attested by increased greenness, is proverbial, and was, we should say, confirmed by

the result of the Doctor's experiments. He also notices the fact, attested by Mr. Ruffin, Mr. Purvis, and Sir John Sinclair, that the atmosphere incumbent upon limed lands is always a healthy one. He calls to mind, also, the well known circumstance, that low, wet lands, where the cultivated plants present a pale, sickly appearance, are also the generators of that class of diseases, known as bilious. From these circumstances, the Doctor infers that the healthiness of the atmosphere is intimately connected, in some way, with the power of plants to reflect the green ray of light. We would again respectfully inquire, if the old idea, that the vigor of the plant, *evidenced by its greenness*, promotes the wholesomeness of the atmosphere by its increased consumption of the deleterious carbonic acid expelled from the lungs of animals, is not as reasonable as the more novel hypothesis of Dr. Wight.

But we have probably already devoted greater space, than will be agreeable to our readers, to this theory of the Doctor's. We will, therefore, conclude by extracting what the Doctor, whom we know to be a practical man, declares to be the practical rules, to which his observations and experience have brought him:

"1st. That as the growth and nourishment of plants appear to be alike dependant on the results of the decay of organic, or animal and vegetable matters, and upon those inorganic substances which increase their action upon the light, we are thus admonished of the necessity, the absolute, indispensable necessity, of periodically restoring to the soil, an amount of both those elements corresponding with that which is taken from it by cropping. If one of those elements only be returned, the productive powers of plants will not be developed to the extent of which they are susceptible. If both be withheld, the soil must, and will deteriorate, because plants are thus deprived of the means by which they live, and grow. Both, then, are essential to the corruption of decayed plants, the leaven of the salts must be added, to give rise to forms of the highest beauty and usefulness. The superiority of animal, or putrescent manures, as they are termed, over those of vegetable origin, is owing solely, it is conceived, to the alkaline salts, which the former contain. But as in these, the ammoniacal, or volatile salts predominate, their effects are necessarily transient, and hence the utility and economy of using those of more fixed character, as lime and ashes. As regards the quantity of alkaline earths, or salts of lime, to be applied to an acre of land, my own experience does not enable me to decide. But is it not reasonable to suppose, that this question, as far as it relates to the action on the light, should be determined by their solubility? It is well known that plants can take up nothing except in the form of solution, and we have abundant evidence going to show that the effects of fifty or a hundred bushels of lime or ashes, have been distinctly visible for an equal number of years. Hence it would appear that the quantity of rain, which falls upon an acre of land, is not adequate to dissolve more than a bushel of these substances. If it were otherwise, if more were dissolved, plants would certainly take up a larger quantity, and the effects would necessarily be less permanent. If, then, this mode of reasoning be correct, a bushel of either of these salts enumerated, or what would be far preferable, as they all have their peculiarities of action, a bushel of each will be fully sufficient for the attainment of their direct influence. To secure their indirect benefits in loosening the soil, and rendering it more permeable to atmospheric influences, thus alleviating human toil, a much larger quantity will, of course, be required. Is the question here asked, whence is the magical influence of plaster compared with the other salts of lime if they act upon the same general principle?—the answer seems to be that it is referrable to its superior power of increasing the action of plants upon the light. Thus the experiments of Sir Isaac Newton have shown that bodies of an unctuous, or sulphureous nature, have a greater relative refractive power, than others, or than their densities indicate. Plaster is a sulphate of lime, consisting of sulphur, oxygen and lime. May we not hence fairly infer that it is the subtle influence of the sulphureous principle, upon that all important agent, light, which enables plaster to produce an effect apparently so vastly disproportioned to the cause.* Consistently with this view the acknowledged pre-eminence of plaster and clover in the rapid improvement of land may be explained by the superior refractive power of the former acting through an appropriate medium in the broad leaf of the latter. Hence it is also that its powers are still more conspicuous in the tobacco plant and the pumpkin vine; its apparent beneficial effect being proportioned to the extent of surface through which its influence is exerted. Indeed, without the aid of those substances, which increase the action of plants upon the light, the broad leaves may be supposed to be less adapted to the purposes of profit and improvement than the narrow leaved, since the operation of nature, a constant and close relation

* Even admitting with Liebig that on the application of plaster a double decomposition ensues, whence results carbonate of lime and sulphate of ammonia, still the singular properties of plaster may be ascribed to the increased action in the light which the sulphureous principle is known to impart.

obtains between the size and structure of the leaf, and the amount of these elements in the soil. Thus when a piece of land has been impoverished by injudicious culture and left to recover by its own natural resources, it invariably clothes itself with a growth remarkable for the narrowness of its leaves. The pine presents us with a familiar illustration of nature's mode of adaptation of plants to soils, and conveys to us at the same time another lesson for imitation in returning good for evil.

"2dly. The essential elements of fertility, organic matters and the salts of lime, having been supplied, the next object will be to counteract the operation of antagonist processes. Of these the chief are the presence of plants other than the proper occupants of the soil and an habitual excess of water. The remedy for the first is through cultivation, and for the second through draining. By thorough draining is meant, the deanston, or furrow system, which has conferred such distinction on the husbandry of Scotland.

"The two preceding rules appear to comprehend the distinguishing of the new or improved system of husbandry. These are, 1st. The alternation of crops, or the introduction of the artificial grasses and of root culture into every system for the purpose of feeding stock or of ploughing into the land—the ultimate object being to replenish the earth in the most economical manner, with the food of plants—with manures. 2dly. Draining and the application of lime, ashes, plaster, marl, &c. Draining and the application of the alkaline earths and salts are classed together, because their action is conceived to be identical—both enabling plants to attract more food from the atmosphere, and at the same time to adapt it more completely to their wants. This twofold purpose they effect through the formation of a substance whose subtle influence upon light gives health, and vigor, and beauty to the vegetable creation.

"Having already, I fear, trespassed too long on your patience, I must beg you to bear with me a few moments longer. We have associated ourselves for the advancement of a cause, not only noble in its object, that of augmenting the means of human subsistence and human enjoyment, but moreover, eminently conducive, if rightly pursued, of that elevation of mind which should be the end of all our studies. The farmer's life is a daily contemplation of a process which ceases to be realised as a miracle, and thus fails of its due impression, because we do not consider that the succession of events of which it is made up is nothing less than a beneficent adaptation to our present state of being—that it is an arrangement in perfect harmony with the dispensation under which we live.—Let us then resolve that henceforth we will rightly pursue it—that with diligence and humility we will study those laws which Infinite Wisdom has ordained for the government of the visible Universe, and bring them into subserviency to the happiness and virtue of mankind, by obeying, and thus 'honoring these laws when we see them clearly, and adoring their profundity when beyond our reach. If the works of nature be thus contemplated, the world from henceforth becomes a temple, and life itself one continued act of adoration.'"

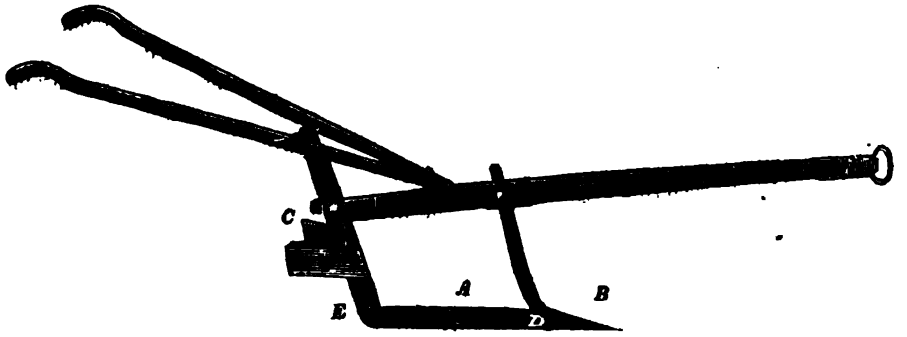
BLACKSMITHS' WORK.

As many of our farmers have blacksmith's shops of their own, the following directions for working steel and making edged tools, plain and simple as they are, may be of great value to them if carefully enjoined upon their smiths, who are frequently great bunglers in this kind of work:

"Working Cast Steel.—We have recently obtained information on this subject, from the most skilful and celebrated workman in the United States, Capt. J. Hill, of Billerica, Massachusetts. We were a little surprised to learn the difference in the management of cast steel, from that of the German. There is something yet remaining mysterious with regard to the nature and management of this article, which no cyclopedia or other vehicle of intelligence have as yet developed. The process of manufacturing cast steel, it is not our purpose at present to describe; but it is evidently composed of refined iron and carbon in very nice proportions. In the process of shaping it into cutting blades and other articles, it is heated and hammered in the manner of other steel: when tempered for this purpose, it is first heated to a full cherry red, and plunged into water till cold. It may then be held over a moderate charcoal fire, until the color of any part which has been filed or made bright after hardening, changes to a reddish orange color. This is the temper for cutting tools; but if a spring temper is required, it is heated over the charcoal till the color approaches a blue: or rather, blue inclining to red. In either case when the steel is brought to show these colors, it is to be plunged in oil—common lamp or linseed oil—which will not affect the color. If the steel is to be rendered soft for turning or cutting, it must be heated to a full red, and left to cool in partially ignited charcoal; in this way it may be made so soft as to be cut or turned into shape as easily as copper, or even common pewter. But the most curious and peculiar process is that of welding. In welding iron, a white heat is indispensable, as every body knows: but not so with cast steel. When the steel is to be welded to iron, neither are to be heated above a full cherry red. The two parts are to be previously lashed or *griped* together, and in

that condition heated: they have then only to be immersed in calcined borax; or to have the prepared borax (borate of soda) sprinkled over the joint, and are ready to adhere by being hammered together. The borax for this purpose, is to be prepared by being previously heated to a full red, and kept heated till it becomes a soft powder like flour. What the chemical effect of the calcined borax on the metalic surfaces is, is not perfectly understood, farther than that its affinity for oxygen is such as to deprive the jointed surfaces of any portion of oxygen which might prevent a ready union of the surfaces. When small pieces of steel are to be welded, they are to be heated to the full cherry red, and immersed in the calcined borax, and are then to be hammered together. The most extraordinary point in the process is the fact, that if the steel is but a little overheated, it will immediately crack into fragments; but by a shifted process, and with the use of borax, the cracks and defects may be healed and rendered sound and solid. We have witnessed the fact, that by a judicious management, a fine tempered cutting edge of cast steel may be bent, warped and hammered, and its shape materially changed, without breaking, or affecting the temper. More may be said on this subject in a future number; but we close for the present with the remark that, even Anderson & Co. the celebrated manufacturers of cast steel, are evidently unacquainted with all the merits of its peculiar properties.—*American Mechanic.*

WINGED COULTER.



The engraving represents an implement very highly recommended by Mr. James M. Garnett, in his report to the Board of Agriculture, for opening corn furrows. We have known it used for several years past greatly to the satisfaction of some of our best farmers. It is in fact nothing but the old-fashioned coulter, made sometimes in one shape, sometimes in another, with the addition of the wings, that may be placed higher or lower, or altogether removed, at pleasure. The coulter is sometimes made with a double point, so that in case of wear or accident to the front, it may be reversed, and the other point brought into play. Mr. Garnett thus describes the one figured in the sketch above:—"The letter *A* represents the bar of the coulter, 1 foot long, and made out of inch square iron. At the end *D*, it has a point which fits into a hole in the heel of the coulter *B*. This is 6 inches long from heel to point, which is sharp, and about an inch and a half broad. The upright part of the coulter should be about one and a half inches wide, and three-quarters of an inch thick. The letter *C* represents two small mouldboards of wood, about 6 or 7 inches long, and 4 wide. They are fastened on with screws or nails, and are to be used only for opening a furrow to plant corn, or any thing else planted in the same way. The advantage of this fixture is, that the furrow will be opened only to the required depth, whilst the coulter, which works several inches deeper, pulverizes the earth below the seed, and thus forms a soft bed for the reception of their roots. In using the coulter to prepare new grounds for the plough, or for other purposes, the mouldboards should be taken off. The letter *E* represents the screw bolt which fastens the end of the bar to what may be called the helve."

For the Southern Planter.

GRASS, RUTA BAGA AND ROLLERS.

Messrs. Editors,—I observe in the Planter of this month, that Mr. William Carter, on the Chickahominy, (a stream dear to me) had tried the mode called *new*, of renovating grass lands as practised in the East somewhere, and found it to answer to his entire satisfaction; and, that he was convinced of the utter inutility of a cleansing crop where grounds required reseeding in grass.

Now, I saw this done as far back as 1817, at Ricohoc, in the county of King & Queen. The land had been put in herdegrass by Col. Smith, and the then occupant of the estate broke up that portion of it for the purpose of planting in corn, but before it could be properly prepared, the grass made its appearance between the furrow slices, plainly indicating that the effort to obtain a grain crop would be attended with more labor than could be bestowed on it, and upon being abandoned, a fine growth of grass ensued. On the Bordley meadows in the same county, it has been the uniform practice for several years, but the harrowing is omitted, the rains, snows and frosts doing this part of the business pretty effectually. The ploughing is done from soon after harvest until late in the winter, and the seed, if requisite, sown from December to February, on the surface, to be forced in place by the action of frost, rain and snow.

'*En passant*,' I have seen ruta baga made with less work than our anti-silk-stocking friend practises. The ground intended for it is put in good heart the preceding fall and winter, and covered with a good coat of litter, no matter how coarse, and remains until the time for planting arrives; then, season or no season, it is thoroughly broken up, harrowed, and the seed dropped thin from a drill, by stakes, and well and firmly rolled in. A thin sprinkling of lime follows, and the crop rarely, if ever fails. The subsequent working consists in the repeated use of the cultivator, and occasionally the hand-hoe, till the leaves have attained a size which will endanger their breaking. The thinning is done by degrees, as taking away the superabundant plants too fast will cause them that are left to fall, and often perish.

I have no hesitation in saying that this crop is generally sowed too early in our climate, and that the gathering of it at once is wholly useless. Every other row may be used out, and the remainder secured by dipping a plough pretty deep on each side of them.

Speaking of rollers, I have lately seen one that certainly is preferable to all others that have come under my observation. A shaft twelve inches square is pierced by three sets of arms, to which are attached felloes of suitable dimensions; upon these are strongly nailed slats three inches wide, one and a half thick; inch and quarter winged gudgeons are inserted in the ends of the shaft, and the frame, which is so close behind as to keep the cylinder clean, has hounds and tongue like a wagon. The driver's seat is on the hinder part of the frame—the machine stands four feet six inches, carries a five foot row, and is an easy draught for two good horses; they should, however, be relieved occasionally during the day, in fact, an all-day's work is too much for any team to any ponderous machine through ploughed ground.

OBERLIN.

Query. Will M'Cormick's reaper answer to mow grass? Has any one tried it?

We thank our unknown friend for his communication, *nameless* as it is. We have no doubt his roller is an excellent one.

M'Cormick's reaper, as at present constituted, is not exactly adapted, we should imagine, to mowing grass. We mentioned the subject to the inventor, when he was with us, and he expressed to us his confidence in his ability to make such alterations as would render it perfect in this respect—he promised to try the experiment, if possible, during the approaching harvest.

FEEDING POULTRY.

Professor Gregory, of Aberdeen, in a letter to a friend, observes, "As I suppose you keep poultry I may tell you that it has been ascertained, that if you mix with their food a sufficient quantity of egg-shells or chalk, which they eat greedily, they will lay, *cæteris paribus*, twice or thrice as many eggs as before. A well-fed fowl is disposed to lay a vast number of eggs, but cannot do so without the materials for the shells, however nourishing in other respects her food may be; indeed, a fowl fed on food and water, free from carbonate of lime, and not finding any in the soil, or in the shape of mortar, which they often eat on the walls, would lay no eggs at all, with the best will in the world."

INDIAN CORN AND OLD FIELD PINES.

To the Editors of the Southern Planter:

Gentlemen,—I have been a subscriber to your paper ever since it has been published, and I have noticed that nearly all your correspondents upon the subject of Indian corn agree, that the rows should be four and a half or five feet distant. This is no doubt the proper distance for all the corn east of the Blue Ridge, but I once happened to be present, in the south-western part of Virginia, at corn planting time, and was surprised to observe the farmers laying off their rows from three feet, to three and a half, wide.

I told them they would make no corn, and insisted that the rows should be wider. One gentleman told me to lay off a few rows in the old Virginia style, and I, being accustomed to the plough handles, laid hold, and run off a few furrows through the centre of the field, four and a half feet apart. In the succeeding August, I visited the same field, and, to my utter astonishment, the rows I had lain off were destitute of grain, and the fodder burnt entirely up, whilst the narrow rows were excellent and the fodder green to the ground. So, I concluded that the proper width of rows depends upon the nature of the soil. I noticed that the lands in Western Virginia dried much sooner after heavy rains than they did east of the Blue Ridge; this is the case in all limestone countries, where the corn must be planted thicker, for the purpose of shading the ground, and retaining the moisture in summer.

I congratulate neighbor Drummond on his conversion to early planting. I have tried the experiment myself, and find that corn planted early will not grow as tall, but will yield more grain, and that of better quality, for it will weigh more to the bushel than the late planting.

A writer on "Forest Trees," in your August number, 1842, observes that old field pine is "of little value." Now I consider a grove of such pines exceedingly valuable for garden posts, or posts of any kind; if properly prepared, they will last as long as locust or any other timber. My mode of treatment is as follows: I take a drawing knife and draw off the bark as the tree stands, as high up as I want to use it: in this situation the tree, which will not die, remains a twelvemonth, when, in consequence of the sun's having drawn the rosin to the surface, it will have become a solid bulk of lightwood and will be ready for use.

Your obedient servant,

J. H. FUQUA.

Amherst, January, 1843.

ECONOMICAL PAINTING.

The following cheap but durable method of painting, has recently appeared in a foreign journal, and as it appears rational in its principles, we have no doubt of its being useful to many in the country, especially in these economizing times:

Take skimmed milk, one quart—fresh slacked lime, six ounces—oil of linseed, four ounces—Spanish white, say whiting, five pounds. Put the lime into a vessel of stone ware, and pour upon it a sufficient quantity of milk to make a smooth mixture; then add the oil by degrees, stirring the mixture with a small wooden spatula; then add the remainder of the milk, and finally the Spanish white. Skimmed milk, in summer is often curdled, but this is of no consequence, as its fluidity is soon restored by its contact with the lime. It is, however, absolutely necessary that it should not be sour, for in that case it would form with the lime a kind of calcareous acetate susceptible of attracting moisture. The lime is slacked by plunging it into water, drawing it out, and suffering it to fall to pieces in the air. For painting with the ochres, the commonest lamp oil may be used. The oil when mixed with the milk and lime, disappears, being entirely dissolved by the lime, and forms, with it, a calcareous soap. The Spanish white must be crumbled, and gently spread on the surface of the liquid, by which it is gradually imbibed, and at last sinks. It must then be stirred with a stick. This paint is colored like distemper, with charcoal, levigated with water, yellow ochre, &c. and applied to the work in the usual method by brushes.—*Mechanic.*

TIMBER.

To the Editors of the Southern Planter:

Gentlemen,—Will you be good enough to ask through your valuable journal, whether timber lasts better, cut in winter than summer? If so, I should like to hear the *rationale*. I know the old theory that the sap is out of the tree in winter and has gone down to the root. Upon this I am very skeptical—seeing that the roots are full of sap in summer, and therefore they cannot well hold during winter their own and that of all the branches likewise. So let us hear what is the most lasting timber for posts? Does chesnut under ground decay sooner than oak?

In haste, yours truly,

WHIT'L P. TUNSTALL.

We believe the most approved doctrine of modern times is, that the sap of trees becomes spissated, or thick, during the winter months, and ceases to flow, the vital energies of the tree being dormant, as it were, until called into action by the genial heat of summer. Under this view, many contend that the timber should be cut in the summer, rather than the winter, because the sap, which is considered so injurious to the lasting properties of the wood, can be more readily expelled in a fluid state. Others contend, that the pores of the wood are more open in summer than in winter, and a great many talk a deal of nonsense upon the subject. We knew a very old experienced timber getter who asserted, that there was but one day in the year upon which timber should be cut, and that was the 28th day of August. To determine the matter by experience, requires a greater degree of exactness and a more extended obser-

vation, than usually falls to the lot of men engaged in the business.

We should be very much obliged for any information that will assist our esteemed correspondent.

From the Farmers' Cabinet.

THE POTATO.

Mr. Editor,—It is, perhaps, not generally known to the subscribers of the Farmers' Cabinet, that in the potato there are two parts, which, if separated and planted at the same time, one will produce tubers fit for the table eight or ten days earlier than the other. This fact has fallen under my own observation, and is the plan I now pursue in order to obtain an early supply for my table, fine and very mealy. The apex or small end of the potato, which is generally full of eyes, is that part that produces the earliest—the middle or body of the potato produces later, and always large ones. The butt or navel end is worthless, except for feeding stock, and, if planted, produces very indifferent small ones, and often none at all, the eyes, if any, being imperfectly formed. The potato being cut two weeks before planted, and spread on a floor, that the wounds may heal, separating the small end from the middle, then cutting off the navel or butt, the body or middle of the potato is then divided into two pieces lengthwise, taking care to have always the largest and finest selected, being convinced that if none but large potatoes are planted, large ones will be again produced—small things produce small things again, and therefore no small potatoes should be planted; this practice is too prevalent, and may account for the many varieties and small potatoes met with in our markets. Who would not prefer a large mealy potato to a small one, that will take hours to boil soft, and then may only be fit to feed the cattle with?

For several years past I have adopted the plan of putting potatoes into the ground late in the fall, covering them with manure, sometimes with tanners' waste bark, and always have succeeded in raising a fine early crop. Last fall I had taken up some as fine and large Mercer potatoes as any one could wish; they were covered with tan six inches thick the preceding fall; many weighed sixteen ounces. No particular care or attention was bestowed upon them through the summer, the tan not permitting any weeds to trouble them, or to draw out the nourishment from the earth, they had therefore all the benefit of the soil, kept moist and clean by the tan, for tan will keep the ground moist and clean, and in an improved state in the driest season. I have found the great advantage of it to my asparagus and strawberry beds, which are annually covered with it.

The potato I consider so valuable and indispensable a vegetable, and having never seen a suggestion in print of separating the potato and planting each by itself, that I have been induced to send you this imperfect and hastily drawn up communication. Perhaps you may think it worthy a place in the Farmers' Cabinet, and if so, should be pleased to hear that some of its patrons will try the experiment of planting separately each part of the tuber, believing that the potato may be much improved by a due regard to the above suggestions.

J. F. H.

Lancaster, February 26, 1842.

NEW HORSE SHOE.

A simple but most ingenious invention has been laid before us in the shape of an improvement in the horse shoe. It is that of making that part of the shoe which is now solid concave; by which the foot is enabled to take a grip, which with the ordinary shoe, is impossible. The principle is, in fact, that of the fluted skate; and whilst the shoe is, of course, lighter than when manufactured on the usual principle, it is equivalent in slippery weather, or on wood pavement, to one that is roughed. The concavity runs entirely round the shoe, having a strong rim in form, equal in thickness to the hoof of the horse's foot, and another at the back, of half that thickness. This mode of formation, whilst it involves the use of a smaller quantity of iron, and consequently less weight, gives a far greater purchase, and is much more in accordance with the nature, form, and texture of the horse's foot. By preventing the necessity of turning up the shoe behind, it places the foot in a more natural position, and thus assists in bringing into operation the frog, instead of placing it out of action, and straining all the other parts of the foot.—*United Service Gazette, England.*

For the Southern Planter.

SOAP-STONE AND COAL-TAR.

Messrs. Editors,—If yourselves or any of your numerous readers can give me any information relative to the application of oil and soap-stone to the roofs of buildings with a view to making them fire-proof, I would be very thankful for it. Having seen in agricultural papers so many puffs of what, afterwards proved to be worse than useless, I repose but little confidence in theories which have not been submitted to the touch-stone of experience.

Will the mixture of oil and soap-stone, therefore, render the roof of a house fire-proof? and will it last long? or will it require frequent renewal?

I would also inquire, gentlemen, whether

either of you, or your readers, has had any experience in the application of coal-tar, and if so, what is the result of that experience?

Very respectfully,

AN INQUIRER.

P. S.—If I mistake not, I think I have seen both of the above applications objected to.

AN INQUIRER.

We should be glad to receive any information upon the subjects alluded to above.

GARDENING.

Gardening time is upon us. And why should not farmers have as good gardens as villagers? We always expect when we see a large enclosure attached to a village residence, that a well cultivated garden will be found within it; and why should we not expect the same on every farm? There is no good reason why. But sadly different, in many instances, is the case! You see often the large farm and the small farm well cultivated, and the garden almost entirely neglected. Is the latter of less importance in its place than the former? By no means. Do the farmer and his family relish the products and fruits of the garden less than others, when they have them? Not at all. Then why this neglect? It proceeds entirely from a mistaken estimate of horticulture. The products of the garden are deemed of little moment, and those of the farm every thing. All hands are hurried and driven day after day on the farm, and the garden, which perhaps has only a wretched little bed or two, is often permitted to go to weeds, unless cultivated by the poor women, who generally find their hands full with their children and domestic labors. Never was there a greater blunder than this in the cultivation of the earth. There is nothing furnishes a richer amount of healthful and delightful sustenance to a family than a good vegetable garden. Indeed, some families with very small garden spots, who carefully cultivate them, receive from them their chief support. Go into their dwellings when their tables are set and you may see a profuse display of vegetables; and perhaps on entering the house of a neighboring farmer about the same time of day, and though there be an abundance of meat and bread, the display of vegetables will be lean and stinted!

A little judicious expenditure of time would entirely correct this incongruity, and furnish to every farmer a rich and delightful table of vegetables through the year. In the first place he must have his little garden spot fenced off with rails, if he is not yet able to do it with pickets. It must be a separate enclosure from the rest of the farm, and kept so faithfully. He must appropriate a day to ploughing and preparing and sowing his earliest beds—no matter what the hurry of business. After these are done *well*, as the season advances, and the time arrives for putting in the later vegetables, if he cannot spare time in the morning, let the team stop in the course of the day, and let them be well finished also, and the business is done until weeding time. When this comes, an hour in the morning early for two or three mornings in a week for a very few weeks, will keep the beds perfectly clean, until the vegetables are fit for the table, and then what will be presented?—one of the finest spots on the whole farm—a luxuriant garden, from whence a rich and healthful treat may be gathered—rendering comparatively but little animal food necessary, and furnishing decidedly the most economical as well as pleasant living for a family.

To those farmers who have been in the habit of getting along for years with a dwarfish half-cultivated bed or two for a garden, we say, try the recommendation here given for one season, and we are sure you never need be urged to it again—for the advantages will be so sensibly felt, that of the two, the work of the farm will be rather suspended for a day, or a part of a day, if necessary, than the garden should not be seasonably and thoroughly attended to.

A spot on the north side of the garden may be advantageously kept as a temporary nursery for choice fruit trees, (such as cherries, plums, and pears,) as they may be obtained from time to time from neighbors and acquaintances, until permanent places may be selected for their future location. Having paid a good deal of attention to trees and agriculture, we write from observation and experience.—*Baptist Register.*

THE HARD TIMES.

"It is an ill wind that blows no good," and we heard a shrewd old farmer observe the other day, that the low price of agricultural produce was already inducing many farmers to pay great attention to the improvement of their lands, who were formerly tempted to "skin" them for the large returns the market afforded.

The idea is not an unreasonable one; such is the cupidity and short-sightedness of human nature, that extra prices will always excite extra production at the expense of improvement. It is true, that money making is the great object of agriculture, but it by no means follows that the most certain way to effect it is to impoverish the land for the sake of a single crop. There is no state of the market in which a farmer may not prejudice his own interest by robbing his land, but it frequently happens, as at present, that prices of produce are so low, that

the best investment a farmer can make of his labor, is, to devote it to the improvement of his land, whereby, for the crop he would take from it now, he will receive twofold hereafter, when prices are better.

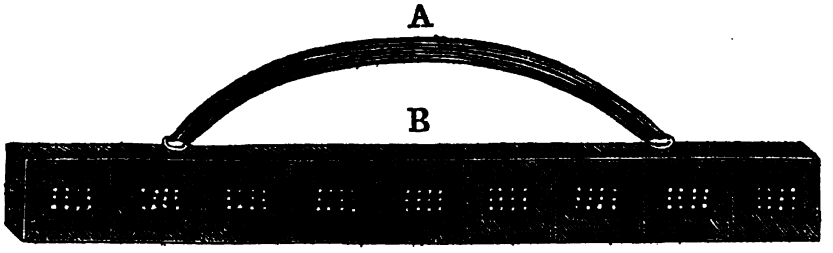
If we have succeeded in extracting any comfort out of the present state of things, we conceive we deserve at least as much credit as the man, who

"Finds tongues in trees, books in the running brooks, Sermons in stones, and good in every thing."

BABBIT'S ANTI-ATTRITION METAL.

Mr. Choate, from the Committee on Naval Affairs in the United States Senate, has reported in favor of a bill authorizing the Secretary of the Navy to purchase for the United States the right to use Babbit's *anti-attrition metal.* The metal is used in machinery—especially in steam engines. The improvement which the inventor has secured by patent consists in the substitution of a soft, unctuous metal, for the hard brass or composition heretofore used to sustain the journals and other moving parts of machines. This soft metal is enclosed in a new, improved manner, in ribs or ledges of harder metal, to prevent its being spread by the weight of the shafting or by pressure. The Committee consider that the improvement is one which the government ought to possess the right to use. It secures a great diminution of friction, and a consequent saving of fuel, and saves one half or more than one half the oil heretofore necessary; lessens the cost of the original construction of the brasses which receive the journals—since they may be made much lighter than before; lessens the expense of repairs, because the soft metal wears longer than the hard, and the ribs and ledges may be relined at small cost: communicates increased efficiency to the engines by the diminution of friction, and prevents the heating of the journals, crank-pins, and other moving parts of the machinery.

A CLOVER BOX.



A, *Leather strap.* B, *Clover box.*

In the engraving above is represented a box, for sowing clover seed, no doubt familiar to many of our readers. Indeed, we had supposed it too well known to need description, else its excellence would long ago have commended it to our notice; but within the last sixty days, we have been so frequently asked if we knew any implement which would sow clover seed evenly and regularly, that, late in the season as it is, we have concluded to describe this simple contrivance, that is by far the best and cheapest we know for the purpose.

The engraving is intended to represent a box eight or ten feet long, about four inches wide, divided into partitions six inches long. The box is lying on one of its sides, so that the interior with a view of the bottom, is presented to the spectator. In the bottom of each partition is an opening of about three inches square, in which is inserted a piece of tin or parchment, or stiff paper, perforated with a number of holes of sufficient size for the clover seed to pass through. In each partition the seed is placed. To the box is fixed a strap, which is passed over the shoulders of the sower, and, carrying the box before him, he walks over the field, agitating the box by his hand if it requires more movement than it receives from his walk. Small slides may be made to cover the holes in the bottom, to prevent the seed from dropping out before the sowing commences.

Any good carpenter can make the box in a few hours, and it will be found extremely valuable for sowing, broadcast, any small seed.

From the New England Farmer.

MANAGEMENT OF SWINE.

In the first place, *there must be a good piggery.* There is a greater failure in this respect than any other. The swine are too cold in cold weather, and too warm in warm weather. The owners of these animals do not sufficiently consider that they require to be comfortable, in order to thrive and do well. It is a lamentable fact, notwithstanding so much has been said and written on the proper management of swine, that many have hogs that are continually *scolding* and *crying;* not so much on account of being scantily fed, as for the want of a comfortable piggery. I went by one of these miserable pens the other night, where the inmates were whining out something like the following:

Oh! cruel master, why do ye
Confine us in this piggery?
Oh! here we lie, without a bed,
Dirty and wet, from foot to head;
Boreas comes in, from every crack,
And bites our *ears*, our *legs* and *back:*
Thus we shiver all the night;
We *scold*, we *whine*, and sometimes *bite.*
Hard master! shall it always be,
To have no *better piggery?*

Who can suppose that swine will do well, when so uncomfortable and restless, and nature forces them to whine out such heart-rending complaints? A moment's reflection must convince every one that swine ought to have a dry, comfortable nest. Furthermore, it is highly necessary that it should be so, that they can bask in the sun in cold weather, and have the benefit of the air and shade in the warm. There is no doubt but a third may be saved by good accommodations.

In the second place, *there must be suitable food and good attendance.* Sows that have pigs, ought to have different keeping from what hogs generally have. In order to have their offspring do well, they not only must have meal, but a good supply of milk, or whey. This is soon imparted to their progeny, and, generally, (with good attendance) produces what the owner so much desires. Parturition having taken place, care should be taken for a few days not to over-feed. After which, the sow ought to be fed five times a day, and have about what the appetite craves. In other cases, roots, especially the *potato*, can be used to great advantage. This, I think, is the most natural for swine, and can be raised (all things considered) with the least expense. Not only roots, but meal, ought to be cooked. I very well know that there is some expense about it—but where the accommodations are good, there will be undoubtedly a great gain.—Weaned pigs and swine that we are fatting, ought to be fed three times a day, and about such a time. Punctuality in this respect is highly important. Some contend to feed twice per day is as well, or better, than oftener. But against this practice, reason and experience raise a powerful voice. Nature teaches that they require not only a breakfast and supper, but a dinner. The food must be of good quality and dealt out liberally, but not to cloy. Meal should be made of a mixture of grain; it is more palatable, and has a better effect upon the recipients. By feeding swine three times a day, in a proper manner, the stomach may be duly distended, but not so as to produce disease; whereas, if the food that they have at three times, be given at two, it will so distend the stomach as to have this effect.

SETTING GATE POSTS.

An experienced carpenter, who has put up a great deal of fencing in his time, tells us, that he has found great advantage from reversing the posts, or setting them bottom upwards. He asserts that this simple arrangement will cause them to last doubly as long, and accounts for it by supposing that the pores of the wood are more closed and better protected from the moisture of the atmosphere, when their natural position is reversed.

For the Southern Planter.

THE APRICOT.

Messrs. Editors,—This delicious fruit is scarcely ever grown in the middle counties of Virginia, and is rarely found in the tide water country. It is owing to the frequent failure of the tree to bear. It blooms early, and the young fruit is blighted. This evil may generally be corrected by planting the tree some five or six feet from the north side of a wall. The blossom is thereby retarded until the severe frosts are over. By this means I have as often succeeded with this excellent fruit as with peaches in ordinary locations. Not the least recommendation of the apricot is it ripens in July, when other fruit is scarce. Mine are said to be the only bearing trees in the county.

I hope this communication will not be too late for those who may be induced to avail themselves of the present season for planting this valuable fruit.

Yours respectfully,

THOMAS MEAUX.

Amelia, Jan. 25, 1843.

THE TOMATO.

The celebrity of this plant has become astonishing. A few years since, prejudice reviled at its excellences with its most vindictive tauntings. *Now*, it is an article of so general popularity, scarcely a garden, or an apology for one, is to be found where it is not cultivated, and almost every voice is loud in proclaiming its excellences. The tomato has three kinds or varieties, to wit: the large common, the egg, and the golden drop. We prefer the two last kinds for culture, as they are firmer, or more solid in their texture and more delicate in their flavor. The tomato may be started in a hot-bed, or in boxes in the house in March. Then by care, large thrifty plants will be ready for putting out as soon as the season of frost is passed. They do not require a rich soil; this causes them to run too much to vine, but rather an excitement to push forward to perfection. We know of no more sure effective to produce this, than to put say half or a third of a common shovel full of hen or pigeons' dung in the hill. It is admirably calculated for pepper or for tomatoes.

After the early frost had killed the vines last fall, a friend of ours, of close observation and exact calculation, experimented feeding the tomatoes that remained to her cow. They were readily eaten, and the quantity of milk was increased. This certainly adds another to the thousand and one uses to which they have been applied. W. B.

We have received a communication commenting in pretty severe terms upon what the writer was pleased to term, "the barbarity" of Mr. Drummond's plan of killing his old and useless horses, cattle, &c. for his compost pit.—In contrast with this inhuman conduct, is cited the treatment Dr. Parish, of Philadelphia, bestowed upon an old and favorite horse of his.

We hardly waited to finish this epistle, to throw it in the fire, and should not stop to notice it now, but that we have observed "stuff" of a similar character in some of the journals of the day. If any gentleman has a horse to which he has formed an attachment, in the name of common sense let him indulge his fancy in keeping and cherishing him as long as he pleases. And so, we can respect the feeling which preserves a favorite tree because it is linked with dear and cherished associations, but is this any reason for going without fire-wood, and leaving the forest untouched? We scorn the sickly sensibility, which will kill an old hard working ox for the purpose of converting him into beef, and cannot bear the idea of putting him to death for any other use. We will guarantee that the animal has more sense than the man, and, if he could be consulted, would tell you, that if you are going to kill him, it is very immaterial to him whether you convert his carcass into beef or into corn and wheat. Now, if we were not afraid of shocking the delicate sensibilities of some people, we would recommend our farmers to proceed straightway to convert three-fourths of their dogs and cats into good wholesome vegetables in the way recommended by Mr. Drummond, and would even venture to urge, that there was no more impropriety in raising them for the express purpose, if they could find their *profit* in it, than there would be in raising and fattening a nice young pullet for the table.

A NEW SPECIES OF MANUFACTURE.

We learn that Mr. Stearns, of Woodstock, Vermont, is about to establish, at the State Dam in this city, a manufactory of satinet out of woollen rags and the usual amount of cotton warp. Flannel rags, old woollen stockings, old carpets, and every kind of woollen rags, excepting broadcloth and cassimere, will be used.—These rags are converted, by a certain process, into a substance resembling wool, and are then spun into yarn. Rags of broadcloth and cassimere cannot be used on account of their being deprived of the adhesive quality necessary to form a firm thread.—*Troy Whig.*

Patent Office, Jan. 25, 1843.

To the Editors of the Southern Planter:

Gentlemen,—I take pleasure in transmitting a very beautiful sample of "Kloss's White Blue Stem" wheat and refer to the Hon. John Snyder's letter for a description of its origin and properties. The same letter will inform those desirous of a larger quantity, where to apply. I also send a sample of Valparaiso wheat, just received from South America.

I am, most respectfully, yours,

H. L. Ellsworth.

—

Hon. Henry L. Ellsworth,

Commissioner of Patents:

Dear Sir,—The bushel of wheat I have sent you is the product of my county—Union, Pennsylvania. Its origin is briefly this: My neighbor, Christian Kloss, saw, in his field of Blue Stem wheat, a single top-proud head; he was struck with the contrast between it and the wheat of the whole field, this being the only white head in it, and much the largest. At

harvest time he secured the head and seeded it in his garden the coming fall; (I do not recollect the time, perhaps six years since;) he divided the next years' produce amongst his neighbors, and last fall there was perhaps 1,000 bushels of this seed sown; one farmer had 400 bushels: it is called Kloss's White Blue Stem. The wheat I send is the growth of last year; it will be recollected our country was filled with rust and smut,—this wheat escaped, yet, it is not quite as full in the grain as the crop of the preceding year; it weighs 65 lbs. per bushel.—We have the Mediterranean wheat in our county—the White Blue Stem is considered far superior. Hoping it may prove useful to the agriculturist, it being Pennsylvania staple, I hazard nothing in recommending it as the best wheat in the northern part of the State, and quite the best I ever saw.

Truly, yours,

JOHN SNYDER.

January 18, 1843.

We beg leave to return to Mr. Ellsworth the thanks of our farmers for his constant and disinterested endeavors to promote their interests.

The samples sent have been made up into little packages of twelve grains each, and are ready at our office for general distribution.

To our friend Mr. R. B. Haxall, the well known proprietor of the Columbia Mills, we have exhibited the specimens received from the Patent Office. The Valparaiso wheat he unequivocally condemns; he says it is an old acquaintance, has been frequently tried, and as often proved to be totally unsuited to our climate. The "Kloss' White Blue Stem" is a fine, plump, heavy grain, (although he hardly thinks it would weigh sixty-five) well worthy a trial, and certainly extremely valuable, if in any way invulnerable to smut and rust.

IMPORTANT INVENTION.

We have been much interested in the effects of a small instrument having the appearance of a *child's whistle*, but performing the important operation of inflating and distending the lungs, and giving them a healthy action. It almost performs miracles. A friend who has just returned from Philadelphia, and who used one of these little tubes for a fortnight, measures about four inches more around the chest than when he commenced its use: his voice is fuller and stronger, and there is every indication of permanent improvement. This important little agent in removing consumption is formed on very simple principles; the patient breathes entirely through a tube for four or five minutes, inhaling the air through one aperture and exhaling it through a smaller aperture, thus retaining one quarter of each inspiration, which tends to expand the lungs.

This instrument is the invention of Dr. J. S. Rose, of Philadelphia, a man of great talents who makes that wide-spread disease, *consumption*, his sole study, and who, if his directions are followed, promises almost to banish from the land this baneful and inveterate foe to the human race. He has written a treatise on consumption, which all who have weak lungs should procure and read.—*Boston Bulletin.*

For the Southern Planter.

TOBACCO.

Messrs. Editors,—I have read with attention the extract in the last number of the Planter, from a pamphlet, published by Peter Minor, Esq. in 1822, on the "Cultivation and Management of Tobacco, from the Plant Bed to the Prize." It is interesting as well as instructive, thus to go back and learn the views and modes of management which were entertained and practiced even twenty years ago; especially, when we find them recorded by a practical man, and one who seems familiar with his subject. It is thus alone, that we are enabled to ascertain with accuracy the improvements which experience has brought to light. In the remarks which I am about to offer, I shall avail myself of your invitation, and attempt a review of some of the opinions advanced in the extract before me, as well as to point out some of the improvements which the experience of twenty years has, in my view, established.

Our writer's remarks on the selection of a spot for a plant bed and the propriety of early and hard burning, are, I think, judicious. One great advantage of burning before Christmas (by which I mean late in the fall or early in the winter) is, that it enables you to burn your land harder, and thereby impart greater fertility to the soil, which, if done late in the winter, will make your plants late and inferior, and if followed by a dry spring, cause a failure. The rationale of this I have never seen attempted,—but may it not be owing to the soil becoming surcharged with so many caustic ingredients, (as the potash, the pyroligneous and other acids generate in combustion,) as to require exposure to the atmosphere and rains for several months, in order to become sufficiently neutralized to act beneficially on the plants? Another advantage of early burning is, that, with the same amount of fuel, you can burn your ground much harder. At that season of the year your land is generally in better order, and is not as cold as it subsequently is, and hence it requires less wood to produce the desired effect. So it is economy

both of labor and fuel to burn early. I would add, that labor and fuel would be still farther economized, if, instead of heaping the brush in your new grounds and burning it out of the way, you would pile it on the spot selected for your plant patch, which, weighted with a little refuse wood, I have found to burn well, and answer every purpose.

Our writer in speaking of the preparation of the plant bed, recommends that the ground be "broken up about two inches deep with the grubbing-hoes," &c. I feel fully persuaded he has fallen into an error on this point; for it is well known, that plants are very liable to suffer from drought in the spring; by breaking up the ground then as deep as practicable with the grubbing-hoe, (being careful always not to turn up any subsoil) you ensure a better supply of moisture. Some of the best planters I am acquainted with use the coulter altogether for this purpose, which not only saves hoe labor, but enables them to break their land deeper, which they think a matter of great importance. It would not be out of place to mention here, that there is a method of preparing plant patches adopted by some of our most successful planters, which I consider a great improvement, and as it seems to have been unknown to our writer, or at any rates not mentioned by him, I will attempt to describe it. I refer to the practice of *underlaying* with tobacco stalks. This is, no doubt, familiar to many of your readers, though probably not to all. After the patch is thoroughly hoed up, chopped fine, and raked, commencing at one edge, a trench is made along its entire length with a broad hoe, the width of the hoe and about two and a half inches deep. The bottom of this trench is then covered with stalks, laid in with the hand one course thick, lengthwise and straight. When this is done, another trench is made similar to the first, and as near the first as possible without interrupting the stalks laid down; the earth taken out in order to form this second trench, is placed on the stalks, and fills up the first trench; the earth out of the third trench, in like manner, is placed on the stalks laid down in the second, and so on. By this means the whole patch is underlaid with stalks. The operation is simple and expeditious, and the plants are thus furnished with a manure better suited, both to their tastes and wants, than any other which can be found. It is best to select spots on alluvial branch flats to underlay, and the same spot may be burned and underlaid every year for a score of years, and it will become better and better—the stalks enriching and preventing the soil from becoming close. It is only necessary for any one, who has never tried this plan, to try it, and he will be convinced that it is greatly superior to any which is practised, both for quantity and quality of plants.

Seeding.—There is a very common mistake made, I think, in sowing our beds too thick, whereby the plants are small, yellow and sickly. The quantity of seed spoken of by our writer, viz: "a table spoonful to the hundred square yards," is the proportion I got from a successful planter, and have always adopted with good results. The first of February is recommended by our writer as the best season for sowing; I think, however, we have succeeded best when we have sowed before Christmas. I have thought when we came to transplant, that the plants from early sowing had better roots; I suppose the tobacco seed, like other seeds, in the first stages of germination, shoots its root down into the soil, some time before the stalk makes its appearance above the surface. This fact we have often noticed in corn, snaps, &c. and it may be, that the tobacco seed, by having more time allowed it, becomes better rooted. Of one thing I am fully satisfied—that flies do not destroy an early sowed patch as readily as one which is later sowed. I have frequently seen the plants eaten by the fly, or more properly, *flea*, (for they have no wings, and seem to be the smallest of the grasshopper tribe, of a dark brown color,) until you could scarcely see a leaf left, and the early sowed, would put out from the bud and do well, while the late sowed would be so much crippled as to die. This I have attributed to the former being better rooted, and consequently better able to resist injuries. Our practice is to sow when we burn, any time after the first of December; before that time, it might be unsafe, as a warm spell might cause the seed to sprout too early, and render them liable to be killed by the frosts of winter. We then cover *thick* with naked brush, as soon as the ground is trod, which covering is never taken off at all until about two weeks before we transplant, unless the spring is unusually wet, or the patch happens to be on land disposed to be springy—in either of which cases, we do so, that the sun and air may dry the soil. A thick coat of brush answers the double purpose of protecting the plants from the frosts as well as from the drought of spring. We manure our plants the first time when they are about the size of a ninepence, with fine stable manure, which should be kept carefully dry for the purpose, and then, in about two weeks, give them another top dressing of the same. The first dressing should be light, to avoid smothering the plant, and neither should be put on when the plants are wet with either dew or rain. The practice of manuring with stable manure early, when the horses are fed on hay, is inadvisable, on account of the grass seed; but if put on after the plants have grown to the size above mentioned, the grass will never interfere. We never find it necessary to take off the brush, either to top dress or hand weed. These can both be done about as soon as the brush could be removed and replaced. We find no

difficulty in walking on the brush with baskets of manure and in scattering it broadcast over the surface; it treads and bruises the plants less than if the brush was removed; and where the land has been properly burned there is but little hand weeding necessary. By treating our plant patches as above described, we have never had our plants killed by frost, nor have we ever had occasion to water them, and further, we have *never failed to have an abundance in good time.*

You will, I trust, gentlemen, pardon the length at which I have dwelt on this part of the subject, when you recollect that a very large proportion of the failures in our tobacco crops, are to be ascribed, either to scarcity of plants at the proper season, or to small, sickly, indifferent ones, which cannot survive the shock of transplanting. Our lands, owing to long cultivation, are not as free as they were formerly, and it requires rather earlier planting for the crop to come in ripe before frost. Good plant lands, too, are scarcer than they once were, and we must make up in cultivation and attention what we have lost in fertility. Having strong, large, vigorous plants, is half the battle. They resist drought, cut-worm, and all other enemies to which they are exposed, much better than small, delicate ones.

Should this communication (which has grown much longer than I intended) be deemed worthy of a place in your columns, gentlemen, I may feel encouraged to follow Mr. Minor in the cultivation of the tobacco crop,—the diseases or accidents to which the crop is exposed, and the modes of prevention as far as I am acquainted with them. There is, I think, an error in his remarks on this subject, which must be regarded by the best planters of the present day as fundamental. *To this*, should I write again, I will endeavor to call your attention.

Yours, very respectfully,

N. A. VENABLE.

Lunenburg County.

The great object we had in view in publishing Mr. Minor's pamphlet, over and above its intrinsic merits, was to call forth such comments, from just such a source, as those furnished us by Mr. Venable. We sincerely hope he will continue his review, and whilst his remarks are so entirely practical, he need not fear to weary either us or our readers by the clearness, and consequent *length*, of detail. If the readers of the Planter are not thoroughly instructed in the important art of tobacco making, it will not be our fault.

Experienced agriculturists tell us that all plants, whether in the garden, field, or forest, if in rows, should be placed in the direction of north and south, in order to admit the sun's rays every day on both sides of the row.

ROOT CROPS.

In a conversation with Mr. Dicken, who is an old fashioned Virginia corn grower, and not much given to "new fangled notions," he expressed to us the opinion, that the farmers of Virginia were much indebted to Mr. BEMENT for his excellent essays upon the cultivation of roots, published in our columns. He says that for rearing calves he has never tried any thing equal to the ruta baga; the finest he ever raised, was fed upon nothing but pasturage in the summer, and chopped ruta baga in the winter. He entertains not the smallest doubt that every farmer in Virginia should raise a crop of roots for the winter use of his cattle.

For the Southern Planter.

POUDRETTE.

Gentlemen,—In running over the articles in the last number of your valuable paper, I was particularly struck with the one from your correspondent Za. Drummond, Esq.—it made every cord in my heart vibrate, and I felt, for one, that I was ready "to go hand in hand" with him, if not for "twenty-five years," at least to the close of my earthly existence, in attempting to improve that part of the Old Dominion which I call my own. I believe it was General Miller who, during our revolutionary struggle, when asked by his superior officer if he could storm a certain fortification of the British with an inferior force, modestly answered, "I will try sir"—he made the effort, and history has recorded the result. I have adopted this as my motto—I am determined to "try" what can be done. I remember to have promised you some time ago a short account of my method of preparing manures from human excrements. I will now redeem that promise, hoping that it may be useful to many of your subscribers. First, I collect the stercoraceous matters separately in large vessels or hogsheads, after the urine has become putrid, which will require but two or three days in warm, and ten or fifteen in cold, weather. I then add sulphuric acid to the urine slowly; if the urine is putrid, a powerful effervescence will immediately take place; the acid must be added until effervescence ceases. By this process, the carbonic acid in combination with the ammonia, is disengaged and driven off, and sulphate of ammonia is formed, which has no volatility, except at a very high temperature. Thus you secure the ammonia formed by putrefaction, which, otherwise would escape. I then add the

liquid to the solid excrements, incorporating them well together, until a very thin batter is formed; into this mass I stir in finely pulverized charcoal, according to my judgment, without regard to any precise quantity; this done, I spread the mass upon boards made tight, in the open air—stir frequently until the whole is dry, then pulverize with a spade, and barrel it up for the use of crops.

My drying boards are protected from the weather by a shed open to the south, so as to receive the benefit of the sun. Manure made in this way I call *Poudrette*, and of its value I can speak in the highest terms. When properly made, it is inodorous, and the application to crops easy, and the effect powerful. I made an experiment with it last season upon sugar beet, in comparison with bone dust, bone dust and stable manure mixed, and stable dung alone. The beets manured with poudrette, came up quicker, grew faster, and maintained a decided superiority to the last, making the largest and best beets; the quantity of poudrette was only a small train to each drill. I used it also upon corn with entire success. In this experiment I subjected it to a very severe test; I selected a very poor spot, put only one and a half gills to the hill as a top dressing, at the time of planting, and the result was truly astonishing, proving it to be beyond all doubt a manure of great strength and power, perhaps surpassing all others *now known*.

It must in all cases be used as a top dressing; such is its strength when planted with seed, the germ is destroyed, and consequently does not come up.

I shall make about one hundred barrels this season, which I intend to use chiefly on corn the coming spring, from which I anticipate the best results.

When I commenced I intended to say something about what, I have been doing in bone dust, dead horses, pigs, dogs, cats, &c. but I am reminded in your editorial what great severity your correspondents may expect at your hands, and as my piece is already much longer than *my "hand,"* I shall close.

Sincerely yours,

GEORGE WOODFIN.

February 6, 1843.

Mr. Woodfin will please to recollect that although we may be a little squeamish about the *length* of our communications, we place no limit upon the *quantity*.

THE FARMERS' REGISTER.

We have received the first number of this well known work issued under the auspices of the new Editor. From this specimen we do not hesitate to express our confidence in Mr. Pleasants' ability to *sustain* the well earned reputation of the "Register;" to *add* to it, would be difficult and superfluous. Mr. Pleasants is an accomplished gentleman and handsome writer; not only on his account, but for the honor and interest of Virginia, we hope the REGISTER may live and flourish for a thousand years.

For the Southern Planter.

CORN CULTURE.

Messrs. Editors,—Your February number contains two most excellent pieces on the culture of corn, and while I subscribe most heartily to Mr. A. Shriver's *close planting*, I object to his *four* ploughings, and more particularly to his "*thorough hoeing*," "that is, chopping away the old hill and giving it fresh ground, cutting up every spear of grass." *This is too much work.* Mr. Shriver thinks wheat succeeds corn to advantage. Now, wheat will not grow after corn in this part of Virginia.

Again, Mr. W. C. Young's notions of "ploughing in the fall"—"cross ploughing in the spring, and early planting, deep covering and anti-replanting" system, is admirable. But, *he* too has *too much* work: "four ploughings and one harrowing? We in this part of the State have a great deal of worn out old fields, which are much improved by ploughing, say once in two, three, or four years. Now, why not plant double the quantity in corn, and give it two ploughings instead of four. I know we shall make more corn, and I am persuaded our lands will be benefitted thereby, which should be with us the great desideratum.

Yours, &c.

A. BAILEY, JR.

Rough Chreek Church, Va., Feb. 9, 1843.

EMIGRATION TO VIRGINIA.

We are happy to see that the natural gifts of the Old Dominion begin to be appreciated by northern emigrants. To good managers we have no doubt that every thing considered, the climate, the facilities of market, the society, &c. &c. the cheap, exhausted, but *grateful* soil in many parts of Virginia, offer the fairest opportunity of investment that can be found in the Union. And now that the golden visions in the West have vanished, the less glittering, but more substantial advantages of the older States begin to be understood. The emigrants to the county of Fairfax, alluded to in Mr. Rives' address, are, we understand, highly delighted with their purchase, and are daily gaining accessions

to their numbers from the county of *Dutchess*, probably the richest and best cultivated portion of the State of New York. In allusion to this emigration, Governor Hill, in the last number of the "Visitor," remarks:

"We have fully satisfied ourselves of the fact, that there are many thousands of acres of land in the States along the Atlantic seaboard now lying useless that may be purchased and cultivated to better advantage and profit than the best lands offered for sale at the West. The Dutchess county farmers who have taken up land for improvement in Fairfax county, Virginia, if their history for the next twenty years could be written, will turn out to be more uniformly successful than an equal number with the same means who have removed to the far West. The new western lands may be more easily brought into cultivation; but Commodore Jones has demonstrated, and the emigrants from Dutchess county will prove that the best and most profitable investment of all will be the judicious expenditure and labor bestowed in reclaiming the worn-out lands of Fairfax county, Virginia."

In this connexion, we will take occasion to mention, that we are authorized to sell a tract of land of 1,700 acres, lying in the county of Prince William, (the adjoining county to Fairfax). The situation is remarkably healthy, the water excellent, and the wood abundant; the whole affording fine pasturage for sheep. It would afford a capital stand for a tavern and store. The whole tract can be purchased for three thousand one hundred dollars, *cash*, or for two dollars an acre, on a reasonable credit.—This is probably one of the greatest bargains to be had in Virginia, and northern Editors would no doubt be conferring a favor upon their subscribers by disseminating information of the opportunity it affords.

For the Southern Planter.

M'CORMICK'S REAPING MACHINE.

Messrs. Editors,—I find that you did not apprehend the purport of my 4th inquiry relative to C. H. M'Cormick's reaper. When I asked "can the reaper be conveniently used unless the wheat ripens in large bodies," I did not mean to inquire whether it would be advisable to purchase one unless the farmer had large fields to reap, but simply to learn whether the machine could be conveniently used to cut small lands, when the grain ripens not in "large bodies," but irregularly in *patches*, as it sometimes does, or whether from the inconvenience of turning, you must embrace several acres in a land to work the reaper to advantage?

As this inquiry is fully answered in a letter received by me from an intelligent practical farmer, (Mr. Abraham Smith, of Rockingham,) and as he speaks in terms of high commendation of the reaper, I shall take the liberty of sending you an extract, thinking that the experience of this gentleman in the use of the machine for three harvests, may be acceptable to many, who, like myself feel an interest in its success.

Very respectfully,

GEORGE A. SMITH.

February 8, 1843.

"*Dear Sir*,—Yours of the 18th instant came to hand on yesterday. I shall endeavor to answer your inquiries respecting C. H. M'Cormick's Reaping Machine in the order in which you have made them.

1st. I have used one of them for three harvests, and have found no reason to alter my certified opinion.

2d. I never cut wheat with dew or rain on it, consequently cannot answer your question on that subject.

3d. It cuts grain on land not more inclined than six or eight degrees as well as on level land. Indeed I have worked it on land much steeper, and found that it did not do so well. It was inclined to run in or out of the grain. If above, it would run in, if below, run out.

4th. You must cut a way with the cradle to start it, and when a square is nearly finished, you will save time by finishing it with the cradle—too much turning with the machine is too great a loss of time. It is not profitable to include less than three or four acres in a square; for instance, if I wish to cut a twenty acre field, I would start through the middle of it, and cut backwards and forwards until it got too wide for profitable work—after which I would make two cuttings of the field.

5th. I have never seen it work upon bedded land, but have been informed that it has been worked on the James River lowgrounds, which is generally bedded, with advantage.

6th. I have never found the ground too wet on my land yet. I would suppose that when it was so miry as to let the wheels sink much, it would not work well.

7th. The cutter has a sickle edge, and if a good one, will cut well ten or twelve days; I have two for my machine; the sickle can be ground.

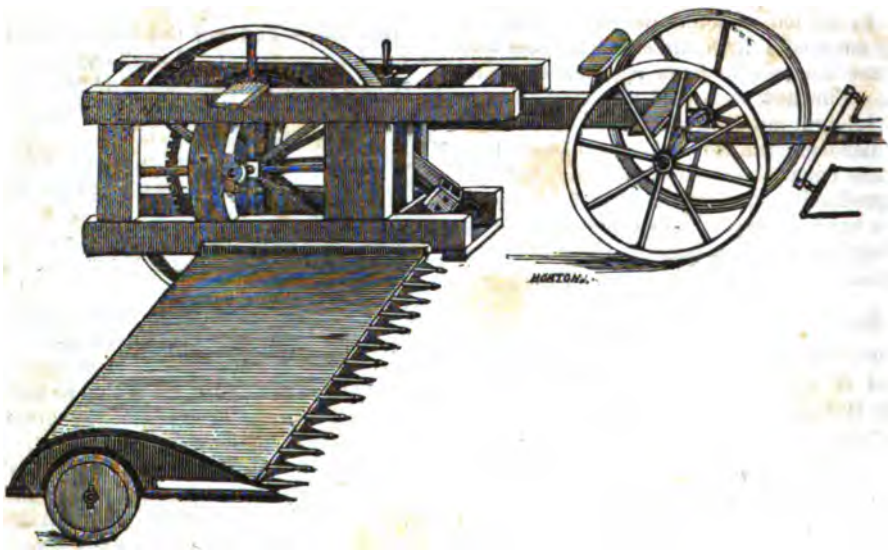
8th. In wheat three feet high, and upwards, or if tangled, it will save grain better than any way I have ever seen—in fact it saves all.

9th. It will reap from twelve to fifteen acres a day, if well tended. It requires two active boys to drive and rake it alternately.

10th. The machine can be drawn by two horses, and is not liable to get out of order. All that is necessary is to have careful hands to work it. It must be kept off stumps, sprouts, and stones that are too large for the wheels to run over. I cannot say that mine is more liable to get out of order than the cradle. It matters not what machine you have, it must be kept in order or it will do badly."

For the Southern Planter.

HUSSEY'S REAPING MACHINE.



Being apprehensive that an impression prevails amongst farmers of the lower section of Virginia unfavorable to my Reaping Machine, and believing, as I do, that that impression has been formed in many instances from a want of correct information, I wish to occupy a small space in your valuable journal to correct as far as I can such erroneous impressions. To do so, it will be necessary to account for the apparent failures, or what has been called such. It cannot be denied that my first machines were very imperfect, but the work was always well done, the chief difficulties being the liability to get out of order, the failure to cut wet grain, and the severe labor on the shaft horse. The first has been obviated, so far as strength and good workmanship will do it; the second measurably so, and the third is entirely removed; but carelessness and bad management in the field cannot be guarded against. My machine originally worked with two horses abreast, and rested on four wheels; it was afterwards changed to shafts, like a cart; the machines used on the James River were of the latter kind. The difficulty arising from the imperfection of these machines was much increased by circumstances for which the machines should not be held accountable. In many fields where they were used the land was cultivated in ridges, with furrows much deeper than some farmers have since found necessary, who have cultivated their fields with reference to cutting with the machine; but this difficulty has been in a great measure obviated by improvements. Another cause of difficulty has been the entrusting the machine to incompetent hands. The machine has in many instances been entrusted to a gang of negroes in one part of the field, while the overseer was attending on the cradlers in another part; the consequence has been, the oil has been forgotten, the screws have been neglected, which were liable to shake loose, until some accident has happened; but this liability is now guarded against. Besides this, farmers have sometimes not found so many acres cut as they expected; this is not always to be attributed to the fault of the machine, but to a want of a reasonable progress ahead, owing to that well known propensity of slaves to improve all possible opportunity to stand still. It has been my constant aim, for

years, to discover, and guard the weak points, and I think my present machines strong and durable. With your permission, I will insert some short extracts from letters which I have received. The first is from Col. Edward Lucas, of Jefferson county, Virginia, writing for his brothers, he says, "I have now the pleasure to communicate to you the result of our experiment with your grain cutters, which have been highly satisfactory, indeed, they have exceeded our most sanguine expectations, and this too after a fair trial of some eighteen days cutting with them this year, and in comparison with cradles in the same field, we found the cutters (meaning the machines) much less liable to break, or be injured by running over rough, and hilly ground, and coming in contact with obstructions, such as rocks, stones, and stumps, than we had anticipated. My brothers say they would not be without them for any consideration. They had four hundred and forty-five acres of heavy wheat, some of it unusually so, and much of it lodged and twisted, and sixty acres of oats, all of which, except forty or fifty acres, was cut by the cutters (two machines) in less than fifteen days, making as high as twenty acres some days, and could have gone up to twenty-five acres to the cutter, if the grain had stood up, and the mules had been urged to their fastest walk." Mr. William H. D. C. Wright, of Queen Anns county, Maryland, in a letter, says, "The machine fulfilled its object to my satisfaction. Where my wheat was heaviest it gave full employment to fourteen binders."

I could multiply such testimonials to fill your journal, if admissible. Many farmers say that the machine has made an additional saving of at least its cost in one year. As to my own opinion, I am aware that it will amount to litlte, but I will say this much, that I am ready to engage to cut thirty acres in one day with one machine, with good horses, in good wheat and on good ground, and the field shall be better cut than any cradled field that can be produced.—The machines used by Col. Lucas had shafts and rested on two wheels; that used by Mr. Wright had a tongue and rested on four wheels. The restoration of the tongue and the necessary wheels, combined with my other late improvements in other respects, is found to be advantageous; it relieves the horses of an objectionable weight, and adds much to the steadiness of the machine, the speed, and quality of the work being the same.

I see in your last Planter an account of another reaper in your State, which is attracting some attention; it shall be my endeavor to meet that machine in the field, in the next harvest.—I think it but justice to give this public notice that the parties concerned may not be taken unawares, but have the opportunity to prepare themselves for such a contest, that no advantage may be taken. Those gentlemen who have become prudently cautious, by being often deceived by humbugs, will then have an opportunity to judge for themselves.

Respectfully,

OBED HUSSEY.

Baltimore, Jan. 30, 1843.

VIRGINIA MANUFACTURES.

The Messrs. Barnes have sent to our office, for the inspection of our country friends, some of the most splendid specimens of agricultural and other edge tools we have ever seen. Are the farmers of Virginia aware that we are selling axes made by these gentlemen, for $1 25 apiece, or $14 a dozen, and warranting them to be equal to any made in the United States?

For the Southern Planter.

BROOM-CORN HAY.

Messrs. Editors,—For the last three years I have been in the habit of sowing the broom-corn seed, broadcast, mixed with the common field peas, which has made an excellent hay, when properly cured. The spring of 1842, through the middle of my patch I sowed a strip of about ten feet wide with Indian corn; the whole being managed precisely in the same way, and to my surprise, when ready to cut, the broom-corn on each side of the Indian corn, looked like two walls—the broom-corn about five feet high, while the Indian did not much exceed two feet. Of course, it was all seeded very thick, and it must be thick, or it will be too coarse for good hay. So, I conclude that the broom-corn is much to be preferred. I have some of the hay on hand that is now two years old. My practice is to house it; my stock eat it kindly. I try to sow it thick to prevent the stalk being large. I esteem it best when the stalks are about the size of large oat-stalks, and from three to four feet high; it should be cut just after the broom or head makes its appearance; that, which is cut in the forepart of the day, should be shocked up after four o'clock; it need not be spread the next day, but the day after, it may just be upset and opened—at evening it should be shocked up again, and if not too coarse, in a few days, it will be ready for the house. You need not fear rain while in the shocks.

One word about the land and seed. Very rich land is not so good; land that will produce from four to five barrels of corn per acre, is rich enough; if the land is very rich, it will grow too large in spite of you. I think one bushel of broom seed and a half bushel of peas, clay-red or black-eyed, will make it thick enough; it

may be sowed any time in May, upon land that water will not remain on long.

I am now carting out the finest marl perhaps you ever saw; my land has the greatest supply of it, and very convenient. It is as fine as wheat-bran, and after being exposed, becomes much whiter, little or no foreign matter in it.

Yours, J. BUNCH.

Chuckatuck, Va., Feb. 8, 1843.

P. S.—I find so many good things, and practical ones too, in the Southern Planter, I wish I could pay back something for interest, say nothing about principal—O, by the bye, I had like to have forgotten my cart-wheel composition; it is the best (blacklead excepted) of anything I have ever used—it is both simple and cheap. I am now, and have been using it for some time; try it before you condemn it. It is clean wood ashes mixed with any kind of common grease or train-oil, if you please. J. B.

THE MANNER OF APPLYING MANURE.

We have received a communication from Mr. S. T. Redd, of Cumberland, on this important subject. After dilating upon the absolute necessity of an improved system of husbandry, whereby we may restore to our lands the fertility of which the skinning system of our ancestors has deprived them, Mr. REDD goes on to remark,

"I am clearly of the opinion, from my own experience, that all the manure raised during the last summer and fall, should at suitable times be carried on the land and scattered in the month of *February*. Although I expect many will differ from me, thinking that certain properties may be lost by exhalation; but the fact is, being spread on in this month, the sun shines with such little heat, none of the properties are lost. It has time to saturate the soil in order to lighten and quicken it, so that whatever is planted upon the land, grows off instantly. One of my neighbors has been trying the plan for the last five or six years; he is delighted with it, and thinks the manure acts better and the land produces more abundantly. Not only is there this advantage in it, but it so quickens the soil, that the young tobacco plant will start to grow as soon as it would in new ground or second year's land, which is of considerable importance; the young plant making such a quick start, soon gets out of the reach of what is commonly called among us the cut-worm, which is so very destructive in cutting down the young plants when slow in starting. Your land should be fallowed previously to carrying out your manure, and it should be spread as carried out. I made an experiment last year upon two pieces of land of the same quality. I had manure spread upon one piece in the month of February, and the other at the usual time, just before planting; the difference was very considerable. I have moreover frequently seen it tried with the same result. There are these advantages. The tobacco grows faster and generally larger—ripens much earlier, and makes generally richer tobacco. All I ask of those who differ with me is, to make a fair trial."

POUDRETTE.

We feel particularly anxious to call the attention of our farmers and gardeners to this convenient, stimulating, and valuable manure. We had our own interest very much excited by the astonishing, and we *guess*, rather exaggerated accounts, we heard of its effects whilst we were at the North last fall. That it is one of the most powerful fertilizers known, and that it should be at least fairly tested by every farmer, who has an opportunity of obtaining a barrel, we do not hesitate to assert; and this, because the experiment can be made at so small an expense, and if it is all they say of it, it will prove the most important addition that has ever been made to the farmer's resources. That it is ever to supersede stable manure, or that the day will ever come when it will be to the farmer's interest to neglect his farm-yard and compost heap, we consider all humbug and nonsense. But that after the farmer has put out all the dirt, dung, and compost, that he can rake and scrape, that he may then purchase poudrette for the balance of his land, that would otherwise go unmanured, with a prospect of realizing two or three hundred per cent. on the outlay, we are strongly inclined to believe.

All chemists agree in according to this substance the very highest fertilizing properties.—Prof. Johnson, than whom none stands higher in the scientific world, says,

"'*Night soil*' is probably the most valuable, and yet in Europe at least, the most disliked and neglected, of all the solid animal manures. It varies, no doubt, in richness, with the food of the inhabitants of each district—chiefly with the quantity of animal food they consume—but when *dry*, no other solid manure, weight for weight, can probably be compared with it in general efficacy. It contains much soluble and saline matter, and as it is made up from the constituents of the food we eat, of course it contains most of those elementary substances, which are necessary to the growth of the plants on which we principally live."

We have heard it estimated that one bushel

of poudrette contained at least as much fertilizing power as ten bushels of stable manure, whilst the facility of putting it out, was much more than ten times as great. It has been applied in this country with great success to wheat and corn. Upon potatoes, peas, turnips, and other garden vegetables, it is described as producing the most astonishing effect in hastening their maturity and increasing their products.—In a letter to the "United States Farmer" Mr. *Jos. Tyrrell*, of New Jersey, states,

"In March last I planted six rows of early peas, four of the rows were manured with poudrette sprinkled liberally over the seed. These came up five or six days before the others, they grew more luxuriant, came in blossom ten days sooner, and yielded much more abundantly than those which had no poudrette. I have tested its merits as a manure for cucumbers and melons, and prefer it to any other for those articles."

Mr. *Lemuel Soper*, of Long Island, makes the following statement:

"I have used poudrette on corn at the rate of a gill to the hill, which produced as good corn as where I put a shovel full of yard manure in the hill. The worms were not as troublesome where poudrette was used as where other manure was used. I also used it on wheat, at the rate of forty, sixty and seventy bushels to the acre. Where I used forty bushels to the acre, I got *as good wheat* as where I used forty wagon loads of barn-yard manure, and *equally as good* as where I used sixty or seventy bushels of poudrette to the acre.

"I also used it on all kinds of garden vegetables, and never had better success. I consider it *better for corn in the hill than bone.*"

Mr. *W. F. Blydenburgh* says,

"'On *grass lands*, in the month of May, it has a *decidedly* beneficial effect as a *top dressing*. I should think twenty bushels to the acre would *double* the crop for one year, but doubt whether it would show much on the second.' Mr. Blydenburgh has used it on nearly all the variety of crops raised on Long Island, and with a view of testing its relative value with other manures. He says, 'I applied the article, last summer, to Indian corn, melons, and other vines, and ruta baga. On corn, a gill was put in the hill, against *eight times* the quantity of hog-pen manure, and against *five* times the quantity of fish manure, the latter a compost of 'sting Rales' and earth, prepared the previous autumn, with results much in favor of poudrette for the first six weeks, after which its superiority became less manifest, until the general appearance and crop became so nearly equal that no difference could be perceived. * * * * In conclusion, I would say that for the hills of corn, poudrette has no rival, so far as the labor and expense on the one hand, and produce on the other, are to enter into the account. A gill to the hill is better than a larger quantity, unless the first four weeks after planting should prove to be very wet, or unless the ground is low and moist. I have seen a striking instance of the good effects of poudrette on a field of oats, applied by one of my neighbors at the rate of fifteen or twenty bushels to the acre, on land of middling quality. The yield was increased at least 70 per cent."

For the information of those who have already ordered the article, as well as those who may conclude to do so, we copy the following directions for its use, furnished by Mr. *D. K. Minor*, of New York:

"I recommend the use of 20 to 25 bushels to the acre for corn, on ordinary land. When the ground has been ploughed, and lays in furrows, I would spread by hand, at broadcast, about 14 or 15 bushels to the acre, and then harrow *crosswise* of the furrows, mixing it *thoroughly*, with the soil. I would then mark out the rows with an ox chain, drawn on the ground, and drop the corn, and put about *half a gill in the hill*, and cover it up *with* the corn. This would require near 8 bushels, making about 23 bushels per acre,—*or* three-fourths of a gill may be put *in the hill* at planting, and an equal quantity spread on at broadcast, and well worked in at the first, or second hoeing—*or*, if not obtained in time for planting, the *whole* may be spread on, and thoroughly worked into the soil, at the hoeing. It is undoubtedly most effectual when applied at planting; but still, very important benefit will be obtained from its application when applied at the rate of 15 or 20 bushels to the acre at the first or even *second* hoeing.

"*For wheat*, to be followed by *grass*, I would spread on at the *sowing* from 15 to 20 bushels to the acre, to be harrowed in *with* the seed.—This will give it a vigorous growth in the fall, and enable it to stand the winter. I would also spread ten bushels more upon it in the spring, and pass a light harrow and roller over it.—When used as a *top dressing* for wheat or grass, without being harrowed in, it should *always* be just previous to a shower.

"It is found to act very favorably on grass seed, *especially on clover*. I have reports from Dutchess and Westchester counties, which say that where poudrette was used on wheat in 1839 and 1840, the grass, *especially the clover*, is much better than where other manure was used in the *same field*, so much so indeed, that it is readily perceived on going into the field.

"For *turnips*, 25 or 30 bushels is a good

dressing. If the seed is sowed at broadcast, the poudrette should be applied in the same way and harrowed in with the seed. For *buckwheat*, 10 or 12 bushels; and for *oats*, 15 to 20 bushels, according to the condition of the land, may be used, *always* to be harrowed in with the seed. For *potatoes*, a *gill* to the hill, to be put in with the seed, is sufficient on ordinary land; a larger quantity will be likely to make more *vines* than are useful.

"For *cucumbers*, *melons*, and other garden vegetables, it may be used in small quantities at *planting*, and on melons, cucumbers and squashes, it will be found a *preventive* to the *striped bug* and other insects, if sprinkled over them in small quantity after they are fairly up. ☞ I find the same *prejudice* and *dislike*, on *first* acquaintance with it, among *insects*, as among *some men*. On applying it to cucumbers and melons, I was amused to see the *yellow bugs*, and other like *fastidious* insects turn their backs upon me, as I have often been to see gentlemen of *delicate* nerves turn up their noses at the *mention* of 'Poudrette'!! This circumstance, however, may not render this valuable fertilizer, of *less* value, any more than the opinion of *gentlemen* of 'delicate nerves' renders the enterprise one of doubtful propriety. I am satisfied from my own experience, that it will be found very valuable on all garden vegetables, not only in producing a rapid growth, but also as a guard against *insects*."

CORRECTION.

A very intelligent gentleman has called our attention to the article on "Urine," at page 35 of the last number of the Planter. It is there stated that a pit of certain dimensions can be filled with loam, in Scotland, for about £41 16s. Our informant states that he is in progress of trying the plan recommended, and that, even in this country, where labor is so much higher, he is satisfied that the pit can be filled for about $22, which is the sum at which he has seen it estimated in other papers. He concludes that it is a misprint, and fears the error may deter some from trying what he conceives to be an invaluable experiment.

WHITE CARROTS.

This is a new species of that valuable root, and from its uncommon productiveness must be an important acquisition in the field root culture. For milch cows, and any other stock, it is a cheap and rich food. From our own experience we are enabled to say its growth excels the common orange carrot in its yield. Unlike others, it projects several inches out of the ground, like the sugar beet, or long turnip. In rich soil with deep tilth, the production is enormous. Twenty-two tons are said, by the American Agriculturist, to have been raised per acre this year in Massachusetts.—*Farmers' Cabinet.*

This is the root, our readers will remember, so highly recommended by Mr. BEMENT in his communication to the Planter. Since the publication of the article, we have had frequent applications for the seed, and we take this opportunity of saying that we are in daily expectation of a large supply from the North.

CONTENTS OF NO. III.

Tobacco—Of stripping and prizing, p. 49.
Sugar—Directions for making from corn-stalks, p. 50.
Cinders—From blacksmith's shop, a fertilizer, p. 50.
Eggs—How to tell male from female eggs, p. 51.
Goochland Fair—Notice of, p. 51.
Address—Dr. Wight's reviewed, p. 52.
Plaster—New theory of its operation, p. 53.
Cast Steel—Directions for working, p. 54.
Winged Coulter—An implement for cultivating corn described, with a cut, p. 55.
Grass—The "new" method of seeding, an old one, p. 56.
Ruta Baga—Remarks on the cultivation of, p. 56.
Roller—Directions for making one, p. 56.
Poultry—Laying hens to be fed with egg shells or chalk, p. 56.
Corn—Proper distance for planting, p. 56.
Old Field Pines—How to convert them into valuable posts, p. 57.
Painting—Cheap and durable method of, p. 57.
Timber—When should it be cut? p. 57.
Potato—Mode of planting, p. 58.
Horse Shoe—A new improvement in, p. 58.
Soap-Stone and Coal-Tar—Inquiries concerning, p. 58.
Gardens—Should not be neglected, p. 59.
Hard Times—The means of improvement, p. 59.
Anti-Attrition Metal—Babbit's recommended, p. 60.
Clover Seed—Box for sowing described, with a cut, p. 60.
Hogs—Management of, p. 61.
Gate Posts—Manner of setting, p. 61.
Apricots—How they should be preserved from frosts in the spring, p. 61.
Tomato—Varieties of, p. 62.
Satinet—A new species of, p. 62.
Wheat—Kloss's White Blue Stem, p. 62.
Consumption—Important invention for its cure, p. 63.
Tobacco—Mr. Minor's pamphlet on, reviewed by Mr. N. A. Venable, p. 63.
Root Crops—Mr. Bement's opinion of, corroborated by Mr. Dicken, p. 65.
Poudrette—Experiments of Mr. Woodfin on, p. 65.
Farmers' Register—Notice of, p. 66.
Corn—Culture of, p. 66.
Virginia—Emigration to, p. 66.
Reaping Machine—Inquiries concerning M'Cormick's answered, p. 67.
Reaping Machine—Hussey's represented, with an engraving, p. 68.
Axes—Messrs. Barnes' recommended, p. 69.
Broom-Corn—Cultivated for hay, p. 69.
Manure—When it should be hauled out and applied to the soil, p. 70.
Poudrette—Its qualities as a manure tested by practical experiments, p. 71.
Carrots—The white, preferred, p. 72.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. III. RICHMOND, APRIL, 1843. No. 4.

JERUSALEM ARTICHOKE—(*Helianthus Tuberosus.*)

We know several judicious farmers that place a very high estimate upon this neglected vegetable. We observe that M. Boussingaut, of France, by actual analysis, has arrived at the conclusion, that in consequence of its powers of extracting carbon and nitrogen from the air, the Jerusalem artichoke is entitled to all the attention that it is now commanding in the best cultivated parts of France. We, therefore, extract the following directions for its cultivation from that excellent paper, the "Nashville Agriculturist:

"From the fact, that many inquiries have been made of late in relation to this very remarkable and useful plant, I am disposed to speak a few things of its culture and uses.—The Jerusalem artichoke is a native of the warmer parts of America, and of course was unknown in Europe till after the discoveries in this country by Columbus and his coadjutors. Since that time it has been cultivated to considerable extent on the continent as well as in Great Britain, but the reports of its profits have considerably varied, in that, as well as this country. In the old world some have cultivated it to afford shade to the game; others have converted the stocks and leaves into fodder for cattle, and others again, have encouraged its growth for the tubers alone. In this country there are two important objects to be kept in mind in raising artichokes; 1st. The improvement of land; 2dly. The use of the tubers. However, the first matter is the cultivation, and I begin with

"1. *Soil.*—Almost any kind of land will produce artichokes, and it is remarkable, that they will grow in the shade, that is, under trees, or in fence corners very well indeed. Land, however, with a tolerably good sandy mould will give the most abundant crop. Low, wet soils, and very tenacious cláy are not so suitable.

2. *Preparation of Land.*—The ground should be broken as for corn, that is to say, one good, deep ploughing, and a thorough harrowing will answer the purpose admirably.

"3. *Laying Out.*—Rows laid off four feet each way with a bull's tongue or shovel plough, in most soils, will be the proper distance.

"4. *Quantity of Seed.*—From four to five bushels will be required to the acre, and unless the long roots are broken to pieces of three or four joints, or eyes each, this quantity will not be enough.

"5. *Manner of Planting.*—Drop one root at each cross of the plough and cover from one to two or three inches with a harrow, hoe, or plough.

"6. *Cultivation.*—So soon as the young plants appear, run round them, with a cultivator, harrow or light plough to destroy the young weeds, and loosen the earth. Keep the ground free of weeds and open to the influence of the atmosphere, till the plants are about three feet high, when they should be laid by, by the use of a cultivator; or in the absence of a cultivator, and when the land has been ploughed, the harrow should pass both ways to leave the ground loose and the surface level. Generally, about the same cultivation given to corn will answer well for artichokes.

"7. *Digging.*—This is the most troublesome job in the management of this crop; and if the hoe is the dependance, the labor will be very tedious. The better plan, is to lay off a land as for breaking up the ground, so soon as the frost has killed the under leaves of the stocks. The plough should run from six to nine inches deep and let the hands, big and little, pass directly after the plough, to pick up, that none of the roots may be covered by the next furrow.

"8. *Yield.*—The produce to the acre is variously estimated from five hundred to one thousand bushels, and it is probable the turn out on medium land would be nearer the latter than the former.

"9. *Uses.*—In England and other parts of Europe, the tubers have been considered quite a delicacy for man, and without doubt they make the most beautiful pickle. But their chief importance, in this respect, is their use in feeding hogs. From the middle of October to the middle of November, the hogs may be turned on the artichokes, and with salt always in troughs to which they can have access, they will grow and thrive till next spring, particularly, if the ground is not too hard for rooting. I have not experimented to ascertain the quantity of hogs to the acre of good artichokes; but from the observation of two seasons, I am of the opinion twenty head will do well on an acre for months. As some have complained their hogs would not root after them, it may be necessary, as hogs,

like men, know not much before learning, that they be taught to root after them. This is done, by calling the hogs after a plough that will throw out the roots, till the grunters learn their habitation, which will require but a very short time.

"10. *Improvement of Land.*—As the stocks grow from ten to fifteen feet in height, and have thick, porous foliage, much of the food of the plant is received from the atmosphere, and thereby the soil is not so heavily taxed as by other crops, the ground is protected from the killing rays of the sun and the stocks and leaves fall and rot very soon,—these advantages, with the manure from hogs, afford the cheapest, and amongst the richest coats in my knowledge.—It is my conviction, (in the absence of long experience) that artichokes in summer, and hogs in winter, will enrich our poor lands cheaper and much better than upon any other plan. To be sure, a farmer cannot have all his land in artichokes, but every one should have enough to support his hogs through the winter, and I venture those who give this crop a fair trial, will reluctantly abandon it.

"11. *General Remarks.*—A few farmers of my acquaintance have informed me, that they have succeeded with corn and artichokes together, and it is highly probable this will prove a successful mode of cultivating these two crops; but on the system of 'one thing at a time,' we would prefer each crop separately. Some have supposed the second year's growth on the same ground would be more valuable than the first; but this is a mistake. The plants grow so thick the second year, that not more than half a crop can be anticipated. It might answer, to plough out rows and cultivate the second year; but the practice of putting artichoke lands in something else the second year, is the plan I much prefer.

"Amongst the arguments which might be used in favor of this crop, it should not be forgotten, that there is no labor of digging, but for seed; that more troublesome weeds and grasses are completely smothered out; and last, but not least, the young plants the second year are more easily subdued than almost any weeds known. Take artichokes all in all, I think them worthy the attention of every farmer who wishes to enrich his lands, or raise his pork with a small outlay of grain. T. F."

For the Southern Planter.

CHARCOAL.

After two days close attention to my coal kilns, I sit down now at night to make a record. I have already burned six kilns, now have two on fire, and wood on hand for another. My kilns are made about sixteen feet at the base, and nine feet high; which with the fillings in the heart as it sinks, contains about ten cords of wood. This ten cords will make about five hundred bushels of coal, dust and all—costing three days labor with four hands. But have you ever considered that the coal is not all the profit? Two or three kilns should be burned on the same ground, by which time the covering earth will be completely saturated with potash and other salts and gases; thus, as I conceive, making it equal in value to the coal. It will take about one thousand bushels of earth to cover a kiln of the above dimensions, to which add one thousand bushels of coal, the produce of two burnings, and we have two thousand bushels of rich manure. After trying the trough and pestle for pulverizing the coal, I have abandoned them, and now tramp and beat the coal about the kiln—the first time returning it as covering, and the last time carting off to the land, or the stock yards. For a third or after burning on the same ground, the coal should be removed, otherwise the covering will be too porous. Thus it will be seen that a few days hence, I will have made four thousand five hundred bushels of pure coal, or nine thousand bushels of rich black compost—and I shall never miss the labor thus employed.

As we are informed that the proper place for coal is on clay grounds, and that one of the objects is to create porosity, I am inclined to think that an inch square and less is sufficiently fine. I have cast about eight hundred bushels over three acres of wheat, which, with dressing of meadows, will, I think prove to be the most profitable mode of using it.

ZA. DRUMMOND.

February 17, 1843.

BLUE GRASS.

Until we are satisfied that there is something in our climate, or an irremedial defect in our soil, to prevent the growth of the Kentucky blue grass, we shall not fail to press its cultivation upon the attention of our readers. We believe it to afford the best grazing in the world, and we are satisfied that the greatest defect in our farming system consists in too much *tillage* and too little *pasturage*. We have an abiding faith in the wonder-working improvement that would flow from the introduction of this valuable grass, not less valuable for its fertilizing than its grazing properties. We entertain too the most lively hopes, that whenever the experiment is fairly tried, our rich river lands, with an application of lime where required, will prove admirably adapted to its growth. We, therefore, copy from a Western paper the following article upon the subject:

"After the imagination is completely exhausted

in eulogising the various products of mother earth, there is nothing to be compared to the old-fashioned blue grass for permanent pasture. It is not denied there are other grasses very valuable; but blue grass comes forward early in the spring, will bear moderate grazing through the summer, and when not too closely cropped, will keep neat stock, such as young cattle, colts and sheep, in good condition all the winter.—This cannot be predicated of any other grass; and as this is a favorable time, something in relation to its management may be beneficial.

"1. *Soil.*—Almost any land with a moderate quantity of vegetable mould will grow it most luxuriantly; but experience has taught, that the richest limestone soil gives by far the best crop. Old fields very much worn will answer, if the farmer can have patience till the tender plant gets properly rooted. Indeed, land fully exposed to the sun is best for every kind of pasture, if the full set can be obtained. Stock will not go into the tallest grass in the shade, while a morsel can be procured in the sunshine. However, very good blue grass pasture can be obtained in woodland, if the timber does not entirely shade the ground, and the farmer will find it to his advantage to cut out the under growth to let his grass have a little sun. Light, sandy and stiff clay soils will not answer for blue grass, and we may be sure remarkably poor land will not do.

"2. *Preparation of Land.*—If it is desired to sow in woodland, the logs, brush, leaves and trash should be taken off. After it is clean, harrow the land thoroughly, and sow immediately. This is the best plan for blue grass on any kind of land.

"3. *Quantity of Seed.*—A bushel or ten pounds of well stripped seed is the usual allowance, but if a bushel and a half can be spared, the stand will be sooner and much thicker. A gallon of clean seed will do as well as a bushel in the chaff. Care should be taken that the seeds are good. Notice that the straw was not cut when too green, or that the seed appear not black and smell musty. The chaff should appear yellow and smell sweet. The eye and nose, will soon tell good from bad seed. Seed properly gathered and preserved, will not be injured for years, but if they have ever been wet, or the least heated, the probability is, that they will not vegetate.—As a general rule, the fresher the seed the better.

"4. *Time of Sowing.*—January and February are the best months for sowing; but March, September and October will do pretty well.—Many experienced farmers prefer sowing while the snow is on the ground. In this way, most of the seeds come in contact with the earth, as the snow melts away, and the stand is apt to be good.

"5. *After Management.*—When the grass first comes up, the blades are remarkably small, and not unfrequently the strong weeds seem to have choked it out; but be not alarmed, the grass is only waiting to send down its roots to get better hold, and by and by, it will conquer every intruder. Some pasture lightly the first year, but we prefer nothing should touch the land, till the second year, or immediately after the seeds ripen. Then, pasture but lightly.—The third year is as soon as a full and vigorous stand can be anticipated. Care should then be taken to tread the surface close with heavy stock, and the grass will be rich and strong in proportion to the density of the sod on which it grows. The more you pack it, other things being equal, the stronger it will rise.

T. F."

LICE ON CATTLE.

A correspondent of the Maine Farmer says: "Lice on cattle at this season of the year, are on the butt end of the horns. Destroy them now, and you will not have it to do in the winter or spring. Strong tobacco juice or alcohol will destroy them."

Spirits of turpentine, rubbed on at the roots of the horns, will also destroy them—and if a teaspoonful of it be put in the *cup* formed just back of the horns, twice or thrice between this and the spring, it will prevent the occurrence of hollow horn.

A strong brine made of salt and water will destroy lice, and it may be said to be the safest application that can be made.—*Ed. Am. Farmer.*

For the Southern Planter.

DOUBLE EARED CORN.

Messrs. Editors,—In the No. of the 'Planter' for March, 1842, your correspondent, Mr. Drummond, asks, "what advantage can there be in cultivating double eared corn?" To satisfy the doubts of myself and others, I was induced in the autumn of 1839 to compare the produce of stalks bearing single and double ears, selecting the best of each kind, and, from memoranda made at the time, I will give you the results, so far as they were ascertained.

On the 11th of November, I weighed *eight* ears taken from four stalks, which weighed 4 lbs. 1 ounce, whilst *four* ears from four stalks weighed 3 lbs. 9 oz.—difference 1 lb. 1 oz. in favor of the double eared corn. On the 12th, I weighed *twelve* ears from six stalks and *six* ears from six stalks—the whole weight not noted, but the difference is stated as 2 lbs. 4 oz. in favor of the double eared corn—the greatest weight from one stalk bearing two ears, was 1 lb. 10 oz., the greatest weight from one stalk bearing a single ear, was 1 lb. 1½ oz. On the 15th, I weighed the produce of three stalks bearing two ears each: the first weighed 1 lb. 10½ oz.—the

second, 1 lb. 11 oz., and the third, 1 lb. 12 oz., whilst the largest single ear weighed only 1 lb. 6 oz.

I have given the above in hopes that it may induce others to turn their attention to the subject, and report the result of their observation, in the Planter. As I have been for several years selecting my seed corn from stalks bearing two or more ears, I think it not improbable that the general size of my corn may be somewhat diminished.

The actual weights are given above: the double ears were invariably gathered from the single stalk, and in every case the largest ears were selected from the corn crib as the representatives of the single ears: it is possible that even they may have grown upon stalks bearing double ears.

Your obedient servant,

JOHN HART.

Louisa, March, 1843.

CUTTING WHEAT.

In the last volume of the Planter we gave the results of some experiments made by Mr. "Hannam," of England, to ascertain the state in which wheat can be cut to the greatest advantage. These experiments excited great interest at the time, and Mr. Hannam's conclusions were confirmed by the experience of several of our correspondents. Since that period we have received several contradictory statements, and one particularly from a high source, stating that good flour could never be made except from wheat fully matured. We see from the 'Cultivator,' that Mr. HANNAM has repeated his experiments on a larger scale, and that they have resulted in the strongest confirmation of his original conclusions, viz: that what he terms the "raw" state affords the greatest bulk and weight of wheat, and the best article for manufacturing purposes. That our readers may the better judge what is intended to be designated by the "raw state" we give a synopsis of the experiments. Five different cuttings were made as follows:

No. 1, reaped	August	12th,	stacked	Aug.	26th.
No. 2, "	"	19th,	"	"	31st.
No. 3, "	"	26th,	"	Sept.	5th.
No. 4, "	"	30th,	"	"	9th.
No. 5, "	Sept.	9th,	"	"	16th.

No. 1 was very green, only fully formed in the berry, and raw; No. 5 was fully ripe. No. 5, in the sample, was bold, but coarse; while Nos. 1 and 2 were finer in the skin, but small, showing they had shrunk some. The raw cut No. 3, was unexceptionable, being as plump as No. 5, and superior to 1 and 2, in thinness and uniform cleanness of skin. There was little difference between 3 and 4, except that the last was more rough than the first.

It was No. 3, cut a fortnight before it was fully ripe that is designated as "raw." From the various experiments, which seem to have been fully and fairly conducted, it appears, that No. 3 is superior to all the other varieties; giving more per bushel than No. 5, by 6½ lbs. of flour; and a gain of about 15 per cent. on the flour of equal measures of grain. 100 lbs. of wheat No. 3, makes 80 lbs. of flour; while 100 lbs. of No. 5, yields 72 lbs. showing an advantage of 8 per cent. in favor of grain cut raw.

In grinding, it was found that No. 5 ground the worst, worse than No. 1. In No. 5, were a greater quantity of flinty particles which would not pass the bolt, than in any of the others. The bran from No. 5 was coarse and heavy; while that from No. 3 was "thin as a bee's wing."

The actual value of flour for the purpose of nutrition, depending in a great measure on the gluten it contains, a sample of Nos. 3 and 5, was analyzed by Prof. Johnston, and he found them to contain respectively, No. 3, 9.15 per cent. of gluten; No. 5, 8.9 per cent. of gluten. Thus proving that the wheat which gave the greatest quantity of flour, gave also the best.

For the Southern Planter.

COAL-TAR ON ROOFS.

Messrs. Editors,—In your Planter for March "An Inquirer" wishes to know the value of coal-tar applied to the roofs of houses. Some ten years ago, having renewed the shingles on my dwelling, I gave them a coat of the coal-tar, and am well satisfied that the effect has been beneficial. It penetrates into the wood about as deep as oil, and it has maintained its lustre almost unimpaired by the weather. I think it will render the roof as nearly fire-proof as any other liquid substance. The only objection to it is, that it makes the shingles shrink considerably, and inclines them somewhat to crack. This, however, is not the direct effect of the tar; but because of the greater power which the rays of the sun have on all bodies of a black color. I would recommend that the shingles be not more than 4½ to 5 inches wide; that they be nailed on during a dry season and made to fit close; and that the tar be applied when they are perfectly dry. The roof should have two coats.—The tar should be warmed over a fire in order

to make it more fluid, and the first coat particularly should be well worked in between the shingles. It gives a black, glossy color to the roof, and cannot fail to add to its durability.

T. S. P.

NEW METHOD OF GROWING ASPARAGUS.

The Editor of the Horticultural Magazine, recommends a trial of the following method of growing asparagus, which is practiced at Nice, and of which a high account is given in the London Gardeners' Chronicle. Take a quart wine bottle; invert it over the head of a stalk of asparagus just rising from the ground, and secure it by three sticks so that it cannot be knocked over. If left in this state, the asparagus will grow up into the interior of the bottle, and, being stimulated by the unusual heat and moisture it is then exposed to, will speedily fill it. As soon as this has taken place, the bottle must be broken, and the asparagus removed, when it will be found to have formed a thick head of tender delicate shoots, all eatable, and as compact as a cauliflower.

Stockley, Nansemond Co. Feb. 21, 1843.

To the Editors of the Southern Planter:

Gentlemen,—I notice in your valuable periodical that Mr. JAMES GORDON took the premium offered by the Henrico Agricultural Society last year, for the best acre of sweet potatoes, viz: 544½ bushels to the acre, which we Nansemond planters think an enormous yield. The sweet potatoe crop is one of our chief staples, and we pride ourselves more on the quality than the quantity of the article. I do not think the average crop in my neighborhood has exceeded 75 bushels per acre, during the last five years. The object of this communication is to beg the favor of Mr. Gordon to give us his "*modus operandi*," through the medium of the Southern Planter, the quality of his land, quantity and kind of manure used, &c. &c.

Whilst my pen is in hand, I will give my limited experience with regard to the mooted point of suckering corn. After a trial of five years, I have satisfied myself that irreparable injury is done the corn by pulling off the suckers. I think that in consequence of the wounds inflicted on the growing plant, the crops of fodder and corn are both greatly diminished. I will cite one year's experience, (1840). My corn was planted 4½ by 4 feet, and two stalks allowed to remain in the hill. In July it was not unusual to see four suckers on many stalks. I directed twenty rows through the middle of the field to be suckered; balance left with all the suckers on; at gathering time, very many of the suckers had each a full ear on them, growing from the *side* of the stalk, many of the parent stalks producnig two large ears. The suckered, produced no more than the *unsuckered parent stalks*. The latter furnishing me an additional quantity of both grain and fodder, independent of the labor saved.

D. H. HATTON.

In an experiment of sowing corn *broadcast*, on the 1st of June, at the rate of one and a half bushels per acre, on rich land, Gen. Harmon, of Wheatland, Monroe county, New York, obtained 18 tons of green stalks per acre. The stalks were small, and almost entirely without ears, and so full of saccharine matter, that the cattle ate them perfectly clean when dry, though they were not cut up fine. The yield was estimated at six tons dry fodder per acre, and was raised on a clover sod turned over and sown the last of May, and the corn cut September 15. The saccharine matter, which goes to supply the corn in the ear, is retained in the stalk when not suffered to ear, and materially adds to its nutritive properties.—*American Agriculturist.*

For the Southern Planter.

TO DESTROY IVY, &c.

Ivy and laurel may be useful, but until I ascertain their value, I shall continue to eradicate more or less of them every year. One inducement to destroy ivy is for the purpose of adding to my arable and pasture fields; and another is the preservation of my sheep from this poison. The use of the grubbing hoe for this purpose is a tedious business, and I have determined to try an implement which I shall call a Grab. I have no doubt but that an implement can be made of iron, which will tear up by the roots every ivy, and dogwood, and other stole and brush rooted shrub. Those of much height should be cut off a few feet above the ground, and the grab fastened toward the top, and immediately under a knot or limb. A yoke of oxen hitched to the grab, by means of a chain, will do the work; but in some cases, it may be necessary to assist, by cutting a root at the off side. What think you of an implement after the fashion of a blacksmith's tongs, much stronger of course, with the handles widely extended, and the grab end curved inward and somewhat sharp; or what think you of an implement after the fashion of dividers or compasses; one side being 12 inches long with a ring attached, and the other 9 inches long and terminating in a hook? Now if a chain be drawn through the ring and dropped over the hook I think we shall have a severe grab. The inner edge of this should also be sharpened, and the plates should be 2½ or 3 inches broad and about 1 inch on the back.

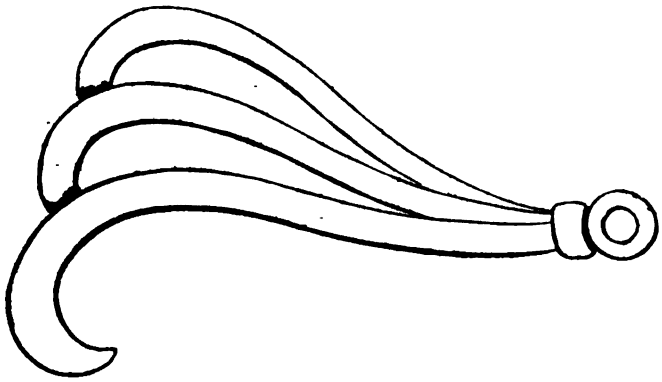
I would be very thankful to any one who will insert in this paper, the model of a grab on a better plan than either of the above.

D. D.

February 18, 1843.

We noticed in an agricultural store in Boston a very simple and efficient implement, that we think would probably meet the views of our correspondent. We will endeavor to represent it in the following drawing. It may be called

A GRUBBING HOOK.



Three bars of iron, two inches wide and a half inch thick, about two feet long, are welded together at one end, where they terminate in a ring through which a chain may pass. The other ends, which are hooked or bent as represented in the engraving, are separated, the two outer ones diverging three inches, each, from the centre bar. A hole is dug on one side of the bush or shrub to be eradicated, and the prongs of the hook are inserted under the roots. The team (oxen are best) is then hitched to the chain passing through the ring, and with one crack of the whip the work is done.

For *mere shrubs*, a much smaller and lighter hook than the one described would be more handy and equally efficient.

GARDEN VEGETABLES.

EARLY CUCUMBERS.—The following has been found by the writer, an easy and successful way to raise them. Place small pieces of dead turf, as large as one's hand, just below the soil in a hot bed, and plant the cucumber seeds upon them. When the stems are two or three inches long, the pieces of turf are removed, plants, roots, and all, to rich garden soil, and they will advance rapidly in growth and produce fruit two or three weeks earlier than those planted in open ground. Suitable turf is easily obtained where grass has been inverted the previous summer or autumn. The young plants should be set out as soon as they will probably escape frost.

EARLY TOMATOES.—Where there is no hot bed, these have been successfully started in pots kept in a warm room, and the fruit ripened a week or two in advance of those otherwise treated.

While the fruit is yet green, I have much accelerated the ripening, by removing the larger leaves from dense bunches of the fruit, and placing white boards behind them, so as to reflect the sun's rays strongly upon them. They soon became red, while the rest remained unchanged in color. Would not planting them, as well as many other of the smaller garden fruits, against a white washed fence or wall, prove of great advantage? It is estimated in England, that a good wall for fruit is equal to an advance of six degrees towards the equator; why then is this powerful means of producing early fruit, so generally overlooked in this country?

EARLY POTATOES.—It is well known that the eye end of a potato will yield a crop earlier by some days, than the root end. This appears to be owing simply to the earlier growth of the sprouts from the eye end. Earliness will be greatly increased by placing the seed potatoes in a box of moist sand, early in spring, in a warm place in the house; and then planting them when the shoots are about two inches long, taking care not to break them off.

LIME.—Its tendency to diminish the growth of leaves and stem, and increase that of seed and fruit, is well known. It had been applied two years before to the strawberry bed, at the rate of about half a bushel to a square rod. A

similar effect was observed on tomatoes, when the manure they received, which was well rotted, had a small quantity of lime thoroughly mixed with it. The growth of their stems was moderate, and the product in fruit, very abundant. Others, manured without lime, grew abundantly in stem, and the product of fruit not quite so great. Slacked lime was used. The difference might have been owing to other causes; at any rate, more experiments are needed.

EARLY LETTUCE.—This was obtained at least *three weeks earlier* than other lettuce sown in the hot bed, by taking up plants, sown the previous autumn in open ground, and transplanting them into the hot bed as soon as it was made. They were urged forward in growth rapidly, by the new heat they received, and formed heads four or five inches in diameter, while the other lettuce was hardly an inch high.—*Cultivator.*

For the Southern Planter.

King William, Feb. 15, 1843.

Messrs. Botts & Burfoot,—I send you below a condensed statement of some of the experiments reported to the King William Working Agricultural Society at their fall meeting. You are aware each member is bound by the constitution to report an experiment made by himself to every meeting under the penalty of one dollar. The day of our meeting at Mulberry Hill Tavern was not very favorable, nevertheless, it was well attended and some specimens of superior butter, articles of domestic manufacture and animals were exhibited. On such of these as were thought worthy premiums were awarded, and an interest in the Society excited which we hope will be increased and lead to valuable results.

Respectfully your friend,

W. GWATHMEY.

Lewis Littlepage's Experiments.

1. Impressed with the opinion that fall fallowing for corn was more injurious to the land than spring, about 25th of March this year, he prepared the land and planted in corn, which proved a very short crop—the fallow was in clover—the cut worm very destructive. His conclusion is that the loss of corn is greater than the benefit to the land.

2. The rows on which corn was shocked, in his wheat field, were sown in oats in spring—and clover seed sown over the field. That on the oat rows grew much more luxuriantly, and when the same field was fallowed for wheat, the effect was very apparent in that crop also.

George R. Trant's Experiments.

1. Soaked seed corn in copperas water two days, (half pound to the gallon of water.) It was not pulled up by the crows or destroyed by cut worm. Other corn adjacent, without copperas was destroyed.

2. In 1841, sowed clover seed after corn, the last time it was worked. They came up and the crop succeeded very well.

Corbin Braxton's Experiment.

Planted harvest beans which did not mature in time for ruta baga.

Edward Hill's Experiments.

1. On peas planted with corn. Two rows of corn planted in peas, every other hill, yielded by accurate weight one pound of corn less than the two next adjoining without peas, both cultivated alike.

2. On drilled wheat. An acre drilled nine or ten inches apart, cut and threshed carefully, yielded only a few gallons more than an acre sown broadcast, immediately adjoining. Considers it not worth the additional trouble of drilling.

William S. Fontaine's Experiments.

1. On harrowing in clover seed the last of March on wheat, alternate rows were left unharrowed. The harrowed wheat, to the eye, for a fortnight appeared benefitted. The clover to this time is better set.

2. Ten acres of purple straw wheat was cut in the dough state—product about 60 bushels, very much shrivelled, and unsaleable if it had not been mixed with the rest of the crop. Ten acres, rather better land, fully ripe, gave me 82 bushels wheat, plump to the eye, and weighing 57 lbs. to the bushel.

From a partial experiment he is induced to believe that wheat after corn, produces more in single than double beds.

Richard Gwathmey's Experiment.

Discovering rust in his late crop of wheat, he commenced harvesting, and continued six days. Having carefully stacked the first and last days, cutting separately, he selected a dozen bundles from each, and threshed them; and on weighing, he found the product of the first dozen to be three-fourths of a pound heavier than the last. He afterwards sowed ten grains of the green parcel, each of which sprouted readily and put up a vigorous spire.

William Gwathmey's Experiments.

1. Lime applied on low light land with black soil, (150 bushels to the acre,) will not destroy sorrel. Six rows of this limed land without any other manure than the natural grass, yielded 763 ears of corn, measuring 7 bushels. Six of the same adjoining, liberally top-dressed with stable manure, when the corn was well up, yielded 1,000 ears, measuring 10½ bushels.—Six, of land adjoining, top-dressed with the manure alone, yielded 777 ears, measuring 7½ bushels.

2. To ascertain the effect of covering up the vines in cultivating the sweet potato, he had the vines covered in two rows, and designated by a stake. The two rows adjoining, planted with similar seed and cultivated (as the crop,) with the earth drawn up, leaving the vines uncovered, yielded three pecks more, of larger potatoes.

Reported by request of the Society.

W. GWATHMEY, *Secretary.*

The very interesting address of the President, Dr. Corbin Braxton, which, by the unanimous vote of the Society was requested for publication, (and promised) has not yet been furnished.

THE LOCUST TREE.

There are probably but few trees more beautiful and ornamental than the locust. It is also valuable for timber, being of a close, solid texture, and as durable for most purposes, as oak or walnut. The trees often attain a large size, and at the proper season of inflorescence, the yellow locust, is festooned with clusters of white flowers, which give it a most beautiful appearance. We have several of these trees growing, and in many sections of our State they are beginning to become quite common, and are propagated both for ornament and use. The great difficulty, however, experienced in causing the seed to vegetate, operates as a discouragement with many; it requiring to be prepared before planting in order to soften the hard and shelly pericarp or hornlike envelope in which nature has deposited the germ. This is performed in the following way. Having first separated your seed from the pods place them in an iron porringer, and pour over them a quart of water, previously heated to the boiling point. Set the porringer aside, and suffer the water to cool gradually. After twenty-four hours decant the water from the seed, and select such as have opened for immediate planting. If any yet remain hard, let them undergo a similar submersion, and at the end of the next twenty-four hours, select again such as have opened, and continue this process until all that are capable of vegetating have opened, and been planted out. Another plan and perhaps a somewhat more economical one, so far as time is concerned, is to subject the seed to the action of *nitric acid*, mixed in the proportion of half an ounce to two quarts of water. The seed should be steeped in this mixture for twenty-four hours before planting, and the water kept tepid or slightly warm by means of a stove or oven. In this case it is not necessary to repeat the process as the good seed will at once evince signs of vitality and germination, while that which continues to be unaffected at the expiration of the twenty-four hours is probably foul or imperfect and should be thrown away. Seed, thus prepared, if planted in a rich, warm soil, in April, will take a vigorous start, and the plants be fit for transplanting in the course of the second or third year after. The trees should never be suffered to stand nearer than fifteen feet apart in any soil, and should they be consigned to one thin and light, the distance should be *twenty*. As they increase, care should be taken to clear out all dead wood from the tops, and to keep down the shoots, where the soil is rich, which will sometimes issue from the roots.

Maine Cultivator.

So valuable has the locust become, not only for posts, but for its uses in ship building, that its growth would probably afford the very best use to which many of the light lands on our water courses could be applied. Facility of water transportation is an indispensable requisite to the profitable produce of any kind of timber. The locust is said to be a great improver of the soil, inasmuch as it returns more than it draws from it, its deciduous offal being particularly enriching. No man ever saw a locust tree without a peculiarly luxuriant growth of grass underneath it.

The crop would be a slow but sure one.

For the Southern Planter.

BURNING COAL.

Messrs. Editors,—As it seems that the farmers are about to commence burning coal for agricultural purposes, and as they are generally ignorant of the process, I will add my mite to what I conceive to be a good cause, by giving some directions.

Seasoned wood is best, because it burns more thoroughly in less time, consequently requiring less attention and producing more coal. Regular colliers cut their wood into cord length, but the farmer may save time by cutting his six feet. On level ground kilns are generally made circular; on hill sides they may be made an oblong square, the length being up and down hill. A kiln of sixteen feet diameter is a good size; and now for its construction. Drive down a peg for the centre, around which draw a circle at the distance of eight feet; on which circle drive pegs, or what is better, cut a narrow trench with a grubbing hoe. Cut blocks of wood three feet long, with which build a pen on the centre nine feet high; around which set up your wood, with the large end downward, and about two feet from the pen. As the wood is packed, fill underneath with short pieces; and as the packing advances fill throughout with other short pieces, for the purpose of giving a slope for covering.

The pen, and filling near the heart of the kiln, should at any rate be of seasoned wood, otherwise the fire will start badly.

When the foundation is complete, the next thing may be to arrange the air holes. These are made at the bottom of the kiln and about six feet apart, by laying two blocks of about two and a half feet long, and six or eight inches thick, with one end against the kiln, and twelve or fifteen inches asunder; over which lay broad pieces of wood. Now proceed to cover by casting on leaves or shavings and earth. When the earth has been packed three or four feet high, stand thereon and cut off any spur ends which may be likely to obstruct a neatly finished covering; which spur ends with other blocks of three to one foot long are to be packed on and around the upper portion of the pen and on the foundation; and thus rounded off neatly for covering. Now proceed to cover till nearly closed, when a few armsful of seasoned wood must be cast to the bottom of the pen, then fire, and more dry wood till filled. When the dry wood is fairly on fire lay some billets of wood across the top, and cover with leaves and earth.

The air will enter the kiln through about half of the air holes, and the smoke, or rather steam, issue from the remaining half; and so soon as the kiln is fairly on fire every crevice above the air holes should be closed. In ten to twenty hours after being under way, the heart of the kiln will have become hollow, when blocks of wood should be filled in, and again closed.—Where the steam strikes, the fire is extinguished, consequently when the wind continues at one point, that side burns first which is to the wind, and on this side in windy and dry weather it will be necessary to close the air holes by degrees as the kiln sinks; but those on the opposite side should be kept open throughout, that the steam may pass off as quickly as possible.

Once in three or four hours the kiln, or kilns, should be attended, and the whole body beat or stamped down, so that the pores may be kept closed, and any point likely to break, detected and timely repaired. One man can attend five or six kilns. When the steam ceases to issue the wood is charred, and the sooner the coal is drawn the better. For this purpose a rainy or snowy day is preferable, or if water is convenient the coal may be extinguished with this; otherwise it must be done by casting on the dusty particles of the covering.

For drawing down the coal the hoe is best, and for dusting the shovel is best. Large kilns will require drawing at two or three different times, at intervals of eight to twelve hours.

Two cautions and I have done. Have you put out the fire? you say yes—well, go around and put it out again; and after starting off, go back and put it out once more. And lastly, mind how you stamp about the top of a kiln when the heart is hollow, for there is some danger of falling in.

A Collier.

Amherst, March, 1843.

ADVICE ON THE CARE AND MANAGEMENT OF TOOLS.

From a new edition of the Cabinet Maker's Guide, we quote the following:

"The goodness of saws, chisels, and other edge tools, depends upon the quality of the steel, which should be uniform throughout, and it is always better to have them tempered too hard than too soft, for use will reduce the temper. If at any time you wish to restore the temper, and to perform the operation yourself, the best method is to melt a sufficient quantity of lead to immerse the cutting part of the tool. Having previously brightened its surface, then plunge it into the melted lead for a few minutes, till it gets sufficiently hot to melt a candle, with which rub its surface; then plunge it in again and keep it there until the steel assumes a straw color, (but be careful not to let it turn blue,) when that is the case, take it out, rub it again with the tallow, and let it cool; if it should be too soft, wipe the grease off and repeat the process without the tallow, and when sufficiently hot, plunge it into cold spring water or water and vinegar mixed.

"By a proper attention to these directions, and a little practice, every workman will have it in his power to give a proper temper to the tools he may use.

"If a saw is too hard, it may be tempered by the same means; if you are near a plumber's shop, you may repeat the process conveniently and without expense, when they are melting a pot of lead.

"In other cutting tools you must wait till the steel just begins to turn blue, which is a temper that will give it more elasticity, and at the same time sufficient hardness."—*American Mechanic.*

February 13, 1843.

Messrs. Botts & Burfoot:

Gentlemen,—An illness from which I am just recovering has prevented me, until now, from asking you for as much room in your paper as will suffice to notice a very abusive attack upon myself, signed "Vindicator," which was one of the first things I saw upon opening your January number. Your sense of justice, I hope, will grant my request, especially when I assure you, that I shall strive to be as brief as possible; and shall have nothing more to say to Mr. Vindicator, even although he should repeat similar abuse in your next number.

This writer presents himself to your readers

in the imposing character of a volunteer champion of Virginia husbandry; and the first specimen he has given us of his powers in that capacity, is, not only to accuse me of "most grossly misrepresenting" the agriculture of my native State, in a letter addressed to the Corresponding Secretary of the New York State Agricultural Society, at his own request; but to assert, as of his own certain knowledge, that I am a man so fond of my joke, as not to scruple, at any time, to sacrifice the truth to it. These are not his identical words; but I take it to be the plain English of the expression, "that he will indulge it (his joke) at the expense of things dearest his heart:" in other words, he will tell a falsehood, if he can make people laugh by it. This truly, is a very pretty character for one whom he calls "confessedly a Virginian, every inch of him!" His argument to disprove what I have stated as facts, *is*, that *he* has never seen what *I* have stated that *I* have seen; therefore, such things can never have been seen by any body. What I have uttered as mere matters of opinion, and especially in relation to the average produce of corn and wheat per acre, in the tide water portion of Virginia, which latter opinion he styles, "a charge of still greater import," he treats as if equally demanding a refutation. Such as he attempts to give, if thrown into the form of syllogism, would stand somewhat thus. All the people in the tide water part of the State must be in a starving condition, if the average produce of corn per acre be only fifteen bushels, and of wheat only five bushels.

But they *are not* in a starving condition.

Ergo,—my opinion as to the average produce of our corn and wheat per acre, must be utterly wrong. *Quod erat demonstrandum.*

Now, if the character for truthfulness and fair dealing which I have been striving through a long life to attain, can be destroyed by such an attack as Vindicator has made upon it, then is the effort to sustain it no longer worth making. But I confidently trust that it will remain what it has been for years past, notwithstanding this most unwarrantable assault; and that none who have any knowledge of me will ever question my facts, however they may dissent from the opinions I deduce from them. Had Vindicator been equally intent upon doing justice both to me, and to the cause which he professes to have espoused, as he seems to have been on defaming me, he would have given your readers, at least the substance of what I said in favor of our agriculture, in the letter which forms the subject of his animadversions. Then, your readers—very few of whom will probably ever see my letter—would have had an opportunity of forming a tolerably just opinion of it. But as Vindicator has managed the matter, they are all left to suppose, that the whole of this letter contains nothing but ridicule and abuse of Virginia husbandry. Such must be the impression left on the minds of all who have read only Vindicator's representation of it. Permit me, therefore, to quote a short paragraph which, I confidently trust will suffice to acquit me fully, with every impartial man, of all the charges which this self-created champion of Virginia husbandry has brought against me.

In one part of my letter to the Corresponding Secretary of the New York State Agricultural Society there is the following passage:

"From the low averages which I have given you of the staple crops in middle and lower Virginia, you will probably form but a poor general estimate of the progress of husbandry in our State. Nevertheless, I can assure you, that in the aggregate, it has been very great in the last ten or twelve years; and that during the last two or three, it has advanced almost at a geometrical ratio. But this advancement, where it is most conspicuous, is still so partial and confined to particular neighborhoods, and so slight elsewhere, that strangers who have no personal knowledge of our State, cannot form a correct opinion, merely from hearing what is supposed to be the general average of our agricultural products per acre. To judge well of the whole extent and amount of our progress in husbandry, they should know the past as well as present condition thereof. They should see the best as well as the worst of our farms; they should examine those around our towns, on some of our navigable rivers, in the Valley of Virginia, and in several of the counties immediately below our first range of mountains. Then, indeed, they could decide, as our Congressmen say, '*understandingly*,' on the subject; and such an examination, I am confident, would discover to them many farms as well managed, in every respect, as any in the United States; although, in proportion to our whole territory, the number would probably be smaller than in some of the States north of the Susquehannah."

I will quote no more, but leave it to every impartial man to decide, whether there is even a shadow of propriety or justice in calling a letter which contains such statements, "a most gross misrepresentation of Virginia agriculture."

After having had so much cause to condemn and to resent the conduct of Vindicator towards myself, I am gratified to find, that there is at least *one* thing for which I can and will thank him. It is, that *he*—an entire stranger to my family—not having the most distant connection with them, so far as I know and believe, should have proved himself so much more sensatively alive to the agricultural fame of my paternal grandfather, than *I*, his naughty grandson, have done. My only excuse—if indeed, *such a deed* admits of any—is, that I had the story from my own father, who, I presume to say, was

probably quite as good a son as Vindicator himself; that the old gentleman did not enjoin me to secrecy; and, therefore, that I thought myself at liberty to repeat it, particularly as there could be no stronger proof of the condition of our husbandry in lower Virginia. Whether it was *in*, or *out* of place for me to say any thing of such a remote period, I shall leave it to others to decide.

I remain, gentlemen,
Yours, with regard,
JAMES M. GARNETT.

There is nothing we have so earnestly endeavored to avoid as the admission of personal controversies into the columns of the Planter, and yet, notwithstanding our utmost vigilance, they have on one or two occasions insidiously crept in. When we received the article of "Vindicator," which was delivered in person, we scanned it with a careful eye, and seeing nothing in it but a critique upon a *public* document, mixed with a little raillery to be sure, we gave it admission that the public might judge between the author and Mr. Garnett. We are extremely sorry to find that Mr. Garnett takes an entirely different view of the article, and exhibits an irritation that we conceive it by no means calculated to excite. If a gentleman writes a public letter, he has no right to object to its being criticised, provided the criticism is free from *insulting* personalities. To find fault with the production, without attaching some blame to the author, is impossible, and for us to declare that we would admit no piece that inculpated an individual, would be to say, that we would admit no comment upon any article that was published. The facts adduced by one individual may be denied and controverted by another, the arguments of the one may be replied to and refuted by the other, but no personal abuse, ungentlemanly language, or charge of dishonorable motives, shall be indulged in the Planter, whilst we have charge of its conduct. Our general course, and particular and often expressed respect for Mr. Garnett, will, we hope, satisfy that gentleman that we conceived the article of "Vindicator" free from those objections. Thinking so still, hard as it is to resist an appeal such as Mr. Garnett makes, and coming from such a source, we would have refused to publish his communication, had we not received a request from "Vindicator," to whom we sent it, that we would do so, with an assurance that Mr. Garnett had wholly misunderstood the spirit of the article, which was written in a pleasant mood by one of his warmest personal friends and admirers, and, we will add, by a gentleman who never entertained an unkind feeling towards him in his life.

From the New York Central Farmer.

ON DITCHING.

As I agreed to give you a description of my mode of ditching, I will now redeem my pledge. About twenty years ago, I purchased my farm in Whitesboro', and on this farm was about 130 acres on the Mohawk flats, and about 60 acres of that was covered with black ash timber, alders and bogs, and the water stood on it nearly the whole year; the 60 acres were not worth as much for any use then as 5 acres are now. Not being acquainted with farming much, I did not know how to commence right, but my first object was to improve my low grounds. I commenced by making small ditches which would soon fill up. I then made a bank or dike with a small ditch on each side, but that did not altogether answer the purpose intended for a ditch and fence. About three years ago I commenced in a different way, which seemed to answer all the purposes intended, that is, to drain the land effectually, and at the same time make a good fence. I make my ditches six feet wide at the surface of the ground, and three and a half or four feet deep, as the land may require, with a slope so as to bring it about one foot on the bottom, and take the turf from the top of the ditch and lay it up on each side with the same slope as the ditch, about one and a half feet high, leaving a lip of about four or five inches on each side of the ditch; on placing the rows of turf that distance back from the ditch, to prevent its caving in by the frost till the bank becomes solid. I make small sluices in the lowest places, through these side banks, for the water to draw off from the top of the ground. The raising of the banks on each side makes the ditch about eight feet on the top, with slope bank, so that horses or neat cattle cannot easily get over it; sheep will run over it. I lay out my lots from twenty to twenty-four rods wide; three ditches drain the land effectually. I have raised a very good crop of corn on some of the lowest of this land this year, and it has been a very wet season.

I will now say a few words about my mode of cultivating these low grounds; they are most profitable for meadow—I therefore seed them down as soon as they are subdued by ploughing, or the ground is smooth, they may be brought into a good quality of grass by sowing on seed and harrowing. I find it very profitable to give these lands a thin dressing with manure; it improves very much the quality and quantity.

Managed in this way, I get three or four tons of hay from each acre; I have taken four tons from 140 rods of ground, well dried. The best time to put on manure is soon after mowing; it will not need it more than once in four or five years.

I have made nearly 500 rods of these ditches; they cost about five shillings per rod; they are the cheapest fence I can make, and by cleaning out the dilches, you can keep the fence in good repair.

Yours, JULIUS WATKINS.

Whitesboro', Nov. 19, 1842.

For the Southern Planter.

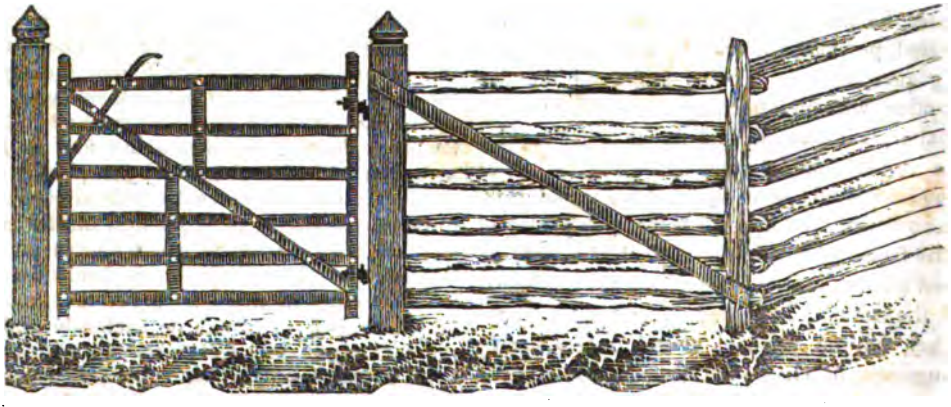
TO IMPROVE A PINY OLD FIELD.

First belt the trees and cut down the bushes. The following year cut and burn every thing into coal which is large enough, and scatter the burnings. That which is not large enough for coal should be spread on gullies and galls; and this should be completed by the middle of March. Now mark off the ground with a coulter, sow oats, (and grass seeds, if you please,) and cover with the same implement. For the purpose of making equal distribution of the manure, and to avoid cost in carriage, the kilns should be placed at about fifty feet distant; and that they may be of about equal size wood should be moved as required. Or if there be a surplus, the wood or coal can be moved elsewhere. At fifty feet distant, we have about eighteen kilns to the acre, which, if producing only one hundred bushels of burned earth and coal to the kiln, is one thousand eight hundred to the acre, which I would apply to the spot, and then comes the blessing.

OLD FLU.

For the Southern Planter.

GATE.



Messrs. Editors,—In No. 1 of the Southern Planter for 1843, I noticed an article on the subject of engravings, in which you express a wish that your friends should forward you sketches, &c. with description of implements or fixtures which are of a novel or interesting character. I have taken the liberty to furnish you with one, which, whatever may be its merits in regard to interest or novelty, I cannot but flatter myself will be found useful to farmers. I therefore send you the above sketch, the object of which is to give you an idea of securing gate posts so firm as not to be moved by frost or otherwise; it can be used either for post and rail or the common worm fence. The only thing necessary represented above, is the brace from the top of the back post of the gate to the first corner of the fence. All that is necessary is that it should be secured at both ends, as the weight of the fence at the corner is sufficient to keep the back post in a perpendicular position; therefore, if you think it desirable to publish it, you may, with the assurance that it will answer an excellent purpose, as experience has proved it without doubt. I will here remark that it would be necessary to place the first pannel of fence in a straight line with the gate when shut; when the gate is open, the brace will not act as repre-

sented, but the duration of that position will not be for any length of time; if so, there can be a pebble or something else substituted that is convenient to be placed under the outer stile of the gate.

Yours, &c. WILLIAM RICE.

Bridgewater, Feb. 1, 1843.

From the American Agriculturist.

CONE'S DYNAMOMETER.

Gentlemen,—I send you a rough drawing and description of a very cheap, simple, and effectual dynamometer. Every farmer can have one if he chooses; the only thing is to hit upon some plan to have them uniform throughout the Union.

Mr. Cone exhibited his plan at the Genesee Cattle Show and Fair, in October. The time was so short, however, after the ploughing match was over, that it could not be applied to any of the ploughs. It was sufficiently tried, however, to satisfy any one as to its accomplishing all that could be required of the most perfect instrument.

Take the beam of any patent scales that will weigh as high as 10 or 12 cwt. Suspend it by the upper hook, and put sufficient weight upon the lower hook to balance the beam. Then hang upon the small end a one pound weight, and put sufficient weight upon the lower hook to balance. Ascertain the number of pounds upon the lower hook requisite to balance the one pound. The beam used by Mr. Cone required 32 lbs. on the weight hook to balance one at the small end. Hitch the lower hook to the clevis of the plough, and the team to the upper hook. The small end runs out upon the land side, at right angles to the plough. From the small end of the beam bring a wire near to the handle of the plough; attach to this wire the upper end or hook of a common spiral balance, and make the other end of the balance fast to the plough.—*The spiral balance becomes the index to the force required to move the plough.* Thus if the index of the balance marks fourteen pounds, then the force exerted on Cone's scale would be 14 X 32 = 448 pounds.

You perceive at a glance, that the principle is perfect. It brings the index directly under the eye of the ploughman, and it is easy of application to any other subject, when it is desirable to ascertain the force necessary to move a ponderous body.

In applying it to a plough, it should be so constructed as to work perpendicularly instead of horizontally. This could be done by having a guide made fast to the beam in which the beam of the dynamometer should play. The balance could then be made fast to the upper slat or round of the plough, and be more convenient for observation; besides it would not be effected by any inequalities on the surface of the ground.

Unless some person takes up the subject, I fear we shall not have a uniform scale. I wrote to Mr. Ellsworth, the Commissioner of Patents, asking him to give the dimensions, and then we should have it uniform throughout the Union. If no other person does it, I will prepare one by the first of February.

Sincerely yours,

T. C. PETERS.

Darien, N. Y., December, 1842.

For the Southern Planter.

A TABLE,

Showing the number of corn hills and other plants in an acre of ground.

Feet.	Feet.	No. of Hills.	Feet.	Feet.	No. of Hills.
20	by 20	108	5	by 4	2178
19	by 19	120	5	by 3	2904
18	by 18	134	5	by 2	4356
17	by 17	150	5	by 1	8712
16	by 16	170	4½	by 4½	2151
15	by 15	192	4	by 4	2722
14	by 14	222	4	by 3	3630
13	by 13	257	4	by 2	5445
12	by 12	302	4	by 1	10890
11	by 11	360	3½	by 3½	3555
10	by 10	435	3	by 3	4840
9	by 9	537	3	by 2	7260
8	by 8	680	3	by 1	14520
7	by 7	888	2½	by 2½	6969
6	by 6	1210	2	by 2	10890
6	by 5½	1320	2	by 1	21780
5½	by 5½	1417	1	by 1	43560
5	by 5	1742			

Messrs. Editors,—I send you the above as a very useful and convenient table that I have compiled for the "Planter." The calculations are, I believe, entirely correct.

Permit me to congratulate you on the March number. It is worth all the money I ever paid you.

Yours respectfully,

PH. B. WHITE.

From the Farmers' Cabinet.

FENCES.

Messrs. Editors,—As materials for fencing are becoming more scarce every year, in this part of the State, our farmers have been turning their attention for some time to the means of lessening the expenses which are continually occurring, to keep their farms in suitable repair. Our fences are either the worm, post-and-rail, or thorn. Unfortunately for us, the thorn has been attacked by insects, which have injured it exceedingly—in some instances it has been almost destroyed. The post-and-rail fence has now become very expensive, in consequence of the scarcity of white oak timber—the best of which

is purchased to be cut into scantling and ship stuff. The plan now coming into use for the worm fence, is to set it upon a good sized stone, elevated at least six inches from the ground, as heretofore.

The rails are first prepared in the following manner:—A measure—say of shingling lath, of the length of the rails, is procured, and holes bored about half an inch in diameter, and four inches from the ends; it is laid upon the rails, and holes bored in them corresponding with those in the measure. When a number of rails are so prepared by boring, and ready to be put into fence, an iron rod suitable to the holes so bored, is set upon the stone or block, on which the fence is to stand, and then the rails are to be inserted on the rod until the panel is completed. The rod is to be bent about one and a half inch at the stone, so that when the fence is completed, it may be clenched or bent over the bottom rail—the panel is secured by making a hitch with a chain or rope, over the joint, and then bending or clenching the iron rod on the top rail—some prefer driving a small wedge at the side of the rod, instead of clenching it, so that the fence might the more easily be removed, if at any time it should be found necessary.—The most expeditious and convenient way for making such a fence, is for two persons to be engaged at it at the same time—one at each end of the rail boring the same simultaneously, and then assisting each other in placing it in the fence. A man can bore many hundred holes in a day, and the expense in preparing and setting up a panel, including the rod of iron, would not exceed the expense of preparing and setting up a panel of post-and-rail fence. A great advantage to the farmer in this method of using the iron rod is, that it holds the rails so completely firm at the joint, that no wind as yet, has been of such violence as to move it from the foundation; such a fence, made of good cedar or chesnut rails, will endure until it wears out with old age.

In the ordinary worm fence, each joint requires two stakes, which of cedar or chesnut, cost with us considerably more than the rod of iron. The oak post undressed, is worth about fifteen cents—the two stakes for each joint of the fence, worth twelve and a half cents. Now counting all the expense of both kind of fences, I am well convinced that the iron rod fence is cheaper by fifteen cents a panel than the post fence—besides, the posts rot out, and it will be necessary to obtain a new set every twelve or fifteen years—and then there will be a loss of at least ten per cent. in supplying the place of broken rails and re-sharpening them and others. The iron rod will cost about seven cents—for a five-rail fence, it should be cut about four feet nine inches. The lap of the rails need be no more than about four inches, and the worm about four feet—such a fence, with this worm, will stand the heaviest blows that we are accustomed to in this climate, especially if the rod be well clenched on the top rail. There may be a saving of one, or even two rails to the panel, in substituting blocks of wood cut short, and bored so as to suit the rod through which it is to be inserted.

If the above communication may be considered worth inserting in the Cabinet, it is freely at your service.

AN OLD FARMER.

Salem County, N. J., Dec. 22, 1842.

We have our doubts about the value of this mode of fencing, although there is something novel and ingenious in it. We incline to our old opinion, that post-and-rail, when properly made, is the cheapest and neatest fence that can be constructed. However, a writer in a subsequent number, in whom we think we recognise an old and experienced friend, lauds the plan very highly whilst he suggests some improvements, which will be found in the following extracts from his communication:

"In the first place, then, I find that a *worm* or *angle* of three feet, is sufficient for the purpose of perfect strength; producing an elegance of curve, far more pleasing to the eye than the straight fence, for any situation, and requiring but very little more ground space than it: while, at that angle, the loss in the length of rails in a panel of eleven feet, is nine inches only; a fact, which would scarcely be credited, were it not proved by demonstration. But in the directions given in the Cabinet, there are some things which, I think, can be improved upon; for it must be very difficult to bend the rod of iron at the stone and clinch it over the bottom rail, if the rod be of a size to give sufficient strength to the fence, without shaking and injury to the work; neither can 'an inch and a half' of bar be sufficient length for the purpose. And then, what is to keep it in its proper place on the stone, unless that be broad, in proportion to its height? Now, in my plan, I have overcome this difficulty and objection, by merely letting the iron rod into the stone about an inch and a half, and fixing it there with melted lead; a labor and expense not worth the naming, when compared with the service rendered. It seems to be intimated also, that a panel at a time can be finished; but it will be found that the rails must follow each other singly, for a considerable length of space, before one panel can be finished, as the ends of them must lap one over the other—but this is of no importance. Not so, however, with the proposal to clinch or bend the rod over the top rail—a work which I should deem al-

most impossible, without destroying the fence by shaking it to pieces. And then, in the event of any of the rails failing, or a wish to remove or repair the fence, how are these clinchings to be raised up, without breaking them off, and injuring the fence? Now, for this trouble and difficulty, I have substituted the very simple plan, of punching a key-hole within half an inch of the end of each rod; and when the top rail—which should be stout and half round—is placed, I shall procure a piece of iron hoop, say six inches in length, punch a hole in the middle of it for the reception of one end of the rod; insert it, and drive a key through the hole and clinch it; and then bend the ends of the hoop to fit exactly, and embrace the end of the top rail. Thus, I have a fence erected in a much shorter time than would be required for the fixing a post-and-rail fence, that can be removed in a quarter part of the time; and the first cost cannot be one half as much; while the insertion of the rods into the stones will constitute it one of the strongest that can be devised; as the angles, acting on the principle of the arch, present a resistance that cannot be overcome by any common occurrence.

"Unless the stones are of considerable thickness, I would advise a block to be put under the first rail; and before placing the top rail, a block of sufficient thickness to raise it to the required height for pinning or keying down tight upon the iron hoop, must be supplied; this will require care and a little practice, but neither art or much labor. When the fence is finished, the top rail ought to range so as to form a perfectly level line; and this is to be obtained by seeing that the tops of all the rods are of the same height, before placing the first rail. It is needless to advise, that these blocks of wood be of the most lasting and enduring nature, and not liable to split. And I would take the present opportunity to urge upon your readers, the great importance of cutting all wood designed for fences, and indeed for every other purpose, in May; strip off the bark and split it to the size required, and expose it to the sun's rays, by setting it on end. I have long satisfied myself, that such timber will last—*how many times longer I can't say*—but I went some time ago to see a post which had been cut in full leaf, and placed in its position in the revolutionary war, and there it remains, firm and sound at the present day; and at the same time I brought away portions of a part of a fence, which had already stood out two other sets of rails cut in the autumn and winter—*that* having been cut in May or June, and placed immediately in fence."

The cost of the iron rod is either misprinted or under estimated. Half inch round iron weighs about ten ounces to the foot, and is worth about five cents a pound. The rod will consequently cost about fourteen, instead of seven, cents, to the panel.

For the Southern Planter.

THE PREPARATION OF THE LAND AND THE CULTIVATION OF THE TOBACCO CROP.

NO. II.

Messrs. Editors,—In accordance with the plan proposed in my last communication, I shall follow Mr. Minor in "the Preparation of the Land and the Cultivation of the Tobacco Crop." The preparation which he recommends for new grounds, is much better, and more thorough, than that which is usually practiced; and I should be glad to see it universally adopted.—But our writer when he comes to speak of lot lands, remarks that "In general it is considered *bad economy to manure land for tobacco*, both because the quantity required for that crop is greater than for any other, and because the quality of the product, as well as that made on low grounds, is coarser in fibre and less marketable." This is the erroneous opinion to which I alluded in the close of my last number. And I feel fully assured that if we have made no other improvements in the last twenty years in the growth of tobacco, we certainly have in this particular.—And I think it would not be difficult to show, that the practice founded upon this opinion, has done more to injure the planting section of Virginia, to lay waste its lands and timber and impoverish its people, than any one whatsoever. You see at once, that on this principle, the axe must of necessity be appealed to every year for a crop, and ("as it is considered bad economy to manure,") the lands thus cleared are after a few years worn out and exhausted. And thus the unhappy planter, as if haunted by the genius of poverty and pressed hard upon by gullies and hens-nest grass and pines, betakes himself year after year with fancied security to the forest. He puts forward his veteran knights of the grub-hoe to wage a war of extermination upon the dogwood and chinkapin bushes—and while "up by the roots" is their watch word—*they* of the axe follow in quick succession, and attack the sturdy spanish oak, fore and aft, front and rear. With the like zeal and intrepidity, they are followed by the heavy armed knights of the maul and wedge, who march slowly and steadily to the conflict—seeing the forms of their stately victims lie prostrate before them, their limbs mangled and severed from the body, with savage ferocity they attack the limbless trunk—"drive home," they shout, and sever every ligament. This wasting warfare is thus prosecuted with a zeal worthy of a better cause, until the poor planter is routed by a hoarde of creditors; his knights, seized with their arms upon them,

are changed to some other service, while he, looking with triumph on the ruin he has wrought, winds his way to the far West.

But to be more serious. The expense of clearing an acre of well timbered forest land, is much greater than is commonly supposed. If any one will take the trouble to estimate it accurately, as I have done, he will find it to cost him by the time he gets his ground ready to plant, about twenty dollars per acre. This alone, it seems to me, ought to be sufficient to deter planters from adopting clearing as a system.—For I am well convinced, and I appeal with confidence to all who have fairly tried both the clearing and manuring systems, for confirmation, that a planter who has lands which were originally pretty good and not gullied, if he will keep stock enough to consume the offal of his wheat and corn crops, and haul corn-stalks, weeds and leaves or other vegetable matter to his stable-yards and cow-pens, can *manure two acres* with less expense than he can *clear one*—and further, that he can make, at the lowest estimate, twice as much tobacco on his manured acre, and get a higher price for it per hundred. These are not theoretical but practical facts. The manuring system is comparatively in its infancy, and none of us have done one-fourth of what we might and ought to do. And that man, or set of men, who, by their efforts and example, should be instrumental in breaking down the clearing system and establishing the manuring on its ruins, would deserve to be considered the greatest benefactors to the tobacco growing section of our State.

By the adoption of the manuring system our estates, instead of being constantly cut down and worn out, or (as a facetious friend of mine observed) "*Re-Pining*" under our operations, would be enhanced in value. Our principal would be rapidly increasing, while we were at the same time drawing the heavier interest.—Under this system, too, all descriptions of labor on the farm can be usefully employed. The old and the young can collect litter and spread it on the land, while only a portion can cut or maul, or hill new grounds. And lastly, the crop on old lands can be cultivated mostly with the plough, and here we have a great saving of that most expensive of all labor—hoe-labor.

With regard to the preparation of lot lands before the manure is applied, there are two modes practiced by our best planters. The one is to coulter the land close both ways, and the other to use the turning plough. The first I should consider best for high land; where there is but little vegetable matter on the surface, and especially where the soil is thin or exhausted. The last is preferable on flat lands, which should be thrown into four or eight row beds. When the manure is applied the land should be thrown into single beds three and a half feet apart.—Where we have old lots well set in the artificial grasses, I think it a matter of great importance to fallow them in July, or when the vegetation is at its most luxuriant state. We thus secure the greatest amount of vegetable matter in the soil—it ferments and rots with greater facility and the land works easier and produces better the ensuing season. There is a difference of opinion among some judicious planters whether it is best to plant in hills or beds. On rough, stiff, or flat lands, the hill is unquestionably preferable—but on light, soft, high lands, the bed answers well and is a great saving of labor; I have tried both, and much prefer the hill if I have time to make them, inasmuch as it ensures a better preparation of the soil, and enables us to plant when it would be too wet to plant in the bed. Should the season be late and unpropitious, I would never lose the opportunity of planting by waiting to hill, if I had my lands bedded.

Passing over the time of planting, priming, topping, &c. on which our writer is sufficiently explicit, we come to the *casualties* or *diseases* to which the crop is subject. The first mentioned by our writer and by far the most serious, is the spot or firing, or more properly the rot. This is caused by too much rain, and is more liable to occur on sandy soils, and less so on those that are stiff, red, or thirsty. It is of much rarer occurrence of late years than it was formerly, which is ascribable, doubtless, to the improvements in management and cultivation which experience has suggested. The mode formerly practiced was to cultivate the crop almost level, and to keep the soil between the hills loose and well broken; under this mode of cultivation, immense losses were sustained almost yearly by fire. But by adopting just the reverse of this, by scraping up carefully with the hoe all the loose earth among the hills, as deep as the plough has gone, and throwing it on the hills, and leaving the ground among the hills as hard, if possible, as a path,—the leaves of the plant, when it is large enough to take the rot, will shield the hill from the rain, and throw the water off on the hard ground, which soon runs off, and the crop is protected. A sufficient quantity of vegetable matter turned into the soil will also do much towards preventing this disease. This is proved by the well established fact, that the first crop on a clover and herdsgrass fallow where the land is very sandy, does not fire, whereas the second or third are almost certain to do so unless some vegetable substance is turned into the soil, and hence such lands (sandy loam river or creek flats) should not be cultivated two or three years in succession, let them be ever so rich, without applying some vegetable matter or other. These are matters of the greatest importance, for there is no disease more destructive to the tobacco crop than the one we are consi-

dering, and I verily believe, if we could have cultivated our crop last year in this way, as unfavorable as the season was, we should have escaped the disaster. But the summer was so unusually wet, we were unable to cultivate our crop in our usual way, and it is the first time we have suffered with the disease. I would not be understood to say that it can always be prevented, but I do believe that it can be generally done, and in the way I have above indicated. I will only add that I very much question the propriety of ever ploughing the crop after the plants have got large enough to take the rot, on account of the loose earth that is thrown up.

Another enemy of the tobacco crop is the *cut worm*. This is not, as stated by Mr. Minor, the larvæ of the black bug, but of a fly resembling the candle fly. This fact was first established by a friend and relative of mine, Mr. Thomas F. Venable, of Prince Edward, who is an accurate observer; he imprisoned the worm in a close vessel, and fed him until he passed from the chrysalis to the fly state. But as it regards the mode of preventing or destroying them, I must request you, gentlemen, or some of your correspondents, to give us some practical information on the subject. This catching them one by one on the hill, and destroying them, is too slow and tedious and ineffectual, if we could do better. We have tried several experiments on this subject, but have not succeeded. We are now in the midst of another. We broke up our tobacco lots last summer according to custom, which were thick set in grass, we are now re-ploughing them, to see if exposure to the frosts will not interfere with the hatching out of the worm. If we succeed, I may drop you a line; till then believe me

Yours respectfully,

N. A. VENABLE.

Lunenburg County.

For the Southern Planter.

SHORT HINTS.

Stop there! that's a live tree, therefore, it should not be injured or disfigured by sticking your axe into it. And that fire too! nobody of thought would build a fire against a tree.

If you wish your son to be a successful farmer, you must cause him to understand that farming is an honorable business.

Sow your seeds in time, and take time to sow your seeds.

Boy, don't count your licks; but make each lick count for itself.

The most graceful sight in the world, is a buzzard sailing at a great elevation, but when he comes down, I grow melancholy, and begin to charge myself with some fault.

O yez; take notice! that the first bad boy I find killing an innocent bird, or trouncing a poor frog, I will have no mercy on him.

Wickedness excepted, there is a time for all things, except one—and I would ask the lazy lubber, what is that?

ARGUS.

Amherst, March, 1848.

PEDDER'S FRANK.

From our respected friend, Mr. JAS. PEDDER, of Philadelphia, we received a few days since a bundle containing, amongst other things, a copy of FRANK, or "Dialogues between a Father and Son on the subject of Agriculture." This little work, which is dedicated particularly to the juvenile class of the agricultural community, is replete with the soundest truths of morality and agriculture. To cherish the gentler feelings of our nature, to elevate the farmer into the kind neighbor and generous friend, whilst he is instructed in the principles of his profession, is exactly the task for which Mr. Pedder's disposition and information most eminently qualify him, and in this little work, these objects have been attempted in a style and manner that do equal credit to the head and heart of the author. We should be very happy, if we could, by extending the sale of his valuable book, repay, in part, the many favors and polite attention, for which we stand indebted to Mr. Pedder.

For the Southern Planter.

TIMBER.

Messrs. Botts & Burfoot,—Although I am no theorist, I fear nevertheless, that any information at my command, derived from experience, or observation, will fail to shed much light upon the inquiries submitted by Mr. Tunstall in your last number. Still I am unwilling to withhold any facts in my possession, bearing upon the matter, to which he refers. The aim of the planter being the communication of practical knowledge, rather than the utterance of speculative opinions, I will very briefly detail some of the results of my limited experience.

About nine years since, I made an aqueduct of chesnut logs about six hundred yards in length. The logs, being about a foot in diameter and the bore about two inches, were laid down in a green state with the bark on, and from two to three feet below the surface of the ground. At this day they are in a sound state, being only a little decayed on the outside, except one of them, so far as I am aware, which was partially decayed, when put down, and which will have to be renewed. There are

about one hundred and forty of these logs. I was advised to use chesnut in preference to other timber, not only as being more lasting, when placed below the surface of the earth, but as not being liable to the obstructions, occasioned by the formation, or growth of small roots, or fibrous matter within the conduit, effectually checking the passage of water, and to which oak and pine are peculiarly liable. The year following the construction of mine, a friend also made an aqueduct of oak logs, several of which he has been compelled to take up, but for what cause I have failed to learn of him, which I now regret. Oak, too, imparts a very unpleasant taste to the water. But all this is somewhat apart from the point of Mr. T.'s inquiry. The durability of chesnut as a material for fencing-rails is universally known; and it is a fact, perhaps, not so generally known, that no timber of the valuable kinds decays with greater rapidity, when in immediate contact with the surface of the earth, where it is exposed to the combined action of the elements, as moisture, heat, &c. When chesnut is used for posts, there are only two methods, I am acquainted with, to guard against rapid decay at the part just referred to. The first is, to fill up the post-hole with stones, so that the rain-water may pass, as it falls, into the earth; and the direct contact with earth and water in a measure be avoided, and thus the action of the sun, which follows, is beneficial, instead of being injurious. This plan is suited only to high and rolling land, and not to flat and low ground, when the water must collect around the post in greater or less quantity. One fact should be specially borne in mind; no kind of timber, whether locust, walnut, chesnut or other, made into posts, ought to be set up in fence, for at least nine months after being cut. If not well seasoned, and particularly if green, the process of decay, which otherwise is scarcely perceptible, becomes very apparent in a few years. The other method, and it is the better, (though it is practicable to unite the two, but I have never seen it done,) is to cause the posts to be well charred for several inches above and below the point where they touch the surface. In hewing them, the workman should take care not to reduce them too much at this part, viz: at and below the first mortice, so that in burning, the danger of weakening the post may be avoided. In short, both oak and chesnut posts, prepared in this way, will last very many years; and all kinds should be kept from nine to twelve months before being put in the earth. Besides the kinds already mentioned, sassafras, chinkapin, white walnut as well as black, mulberry, box oak, and I believe, catalpa, (sed quære de hoc,) are excellent for posts; and all should be seasoned, but oak and chesnut require charring to the depth of half an inch as before remarked.

The other inquiry, as to the season of the year in which timber should be cut, involves a mooted point and leads to some little speculation. The return of the sap into the roots in winter is a very ancient and a very common fallacy, as Mr. T. intimates. What then becomes of it? Why, if I dare utter Latin again, it is *functus officio;* or in vulgar parlance, it is *used up*. Possibly the *necessary* answer to a single question may satisfy him. How does he account for that umbrageous foliage beneath the refreshing influence of which he has so often reposed, while luxuriating in the beauties of nature, as they evolved before him in all their expansive loveliness, to the charms of which, one of his refined taste and keen sensibilities is ever alive? or whence those concentric circles, traceable by the naked eye, when the tree is sawed asunder, one of which is added every year, and denotes its age with such unerring certainty? Now I submit, with all deference, that the sap is the material of which, in part at least, the leaves and new wood are formed; in a word, the food of the plant, and to form which must require a large amount. The pores being certainly the conduits, are we to be taught to believe, that the sap is the mere agent by which the nutriment, forming the new growth, is conveyed, and that it does not enter into organic combination; whose office is analogous to the expanded leaves, which are said to act as lobes in supplying the plant with atmospheric air? But even upon this latter idea, may not the disappearance of the sap be explained upon the ground, that having performed its office, it has passed by evaporation from the body of the tree, just in the same manner as aqueous particles are passing off momently from the surface of the human system, when in health; except that in the former case, it is periodical; in the latter, without intermission. The other, however, seems to me to be the better opinion. For wood, as we all know, is a compound substance of which water is a component part, but in what proportion I am not chemist or botanist enough to tell. We know that the formation of the leaf and wood begins with the first signs of vegetation. When the operation ceases is a little more doubtful. The leaves are fully developed long before the arrival of summer; but the growth of the wood goes on actively to a much later period; probably to the first of August. After which, if I might hazard an opinion, timber may be cut with safety. With few exceptions, any kind may be destroyed in August, root and branch, without danger of sprouting, by simply cutting it down, which seems to show, that the sap is exhausted and all power of reproduction effectually paralyzed.

It is an express order, I believe, of the Navy Department, to have all the timber for the construction of our public vessels felled between the 20th October and the 20th of February, and for

most uses, among practical men, the period for cutting is from August to March. I presume for the reason, that the quantity of sap and moisture in the wood is so great, from March to August, that the timber, when split is very apt to spring or warp, and also to crack; both of which effects injure it. Nor is this all. Being very green and sappy, it is very difficult to rive. The process of growing imparts increased tenacity to it, owing to the formation of what laborer's call *hen's teeth* in the outer grain of the wood. Later in the season, or in winter, none of these objections occur. In speaking of 'oak,' in the preceding remarks, white oak is meant.

I am assured by observing men, that rails made from black, red, and chesnut oaks, after the bark is stripped off for the tanner, decay rapidly. Trees, the bark of which is for the use of the tanner, are always cut in this latitude in May, when the sap or juices abound; and further, that as soon as new wood, *or sap*, indurates, which is believed to be about the last of June, or first of July, the timber then cut will soon cast the bark, and the white rim, or *sap*, becomes as hard and as durable as the heart itself. After all, a series of experiments, carefully made throughout the year in different kinds of timber, can alone settle the question as to the best time for cutting it. This might easily be done, though it would require time to perfect it, as *time* is an essential ingredient in the question. Tanners must have bark; but if the opinion here indicated be correct, ought not all other descriptions to be cut, as soon as the new wood is perfectly formed, or the precise period is clearly ascertained, by cutting in May, June, July, &c. and the rails, if made into rails, kept under the eye of him making the experiment.

JAMES M'ILHANY.

Loudoun, March 3, 1843.

For the Southern Planter.

Patent Office, March 1, 1843.

Messrs. Editors,—I hasten to inclose you a small quantity of tobacco seed, with a copy of Mr. Ellicott's letter, hoping that this new experiment will prove highly useful.

Very respectfully,

H. L. ELLSWORTH.

Patuxent Iron Works, Anne Arundel Co. Md.
February 27th, 1843.

HON. H. L. ELLSWORTH:

Sir,—The tobacco seed you gave my brother Andrew, which you represented to be from Spain, has produced plants mostly having leaves on them fourteen inches wide, which is sufficient size for wrappers; which is not the case with Havana plants.

The tobacco appears to be of very superior quality, a sample of which I shall send you; also some of the segars as soon as I have them made up.

I send you nearly all the seed I have saved, believing tobacco from this seed will be equal to the best Havana.

Yours, with respect,

ELIAS ELLICOTT.

Two very small parcels of tobacco seed, one marked as "Ellicott's," the other as "from Consul at Trinidad," were received with the above. We keep them for Mr. N. A. VENABLE, as a small return for his valuable communications to the Planter.

THE FARM HORSE.

We have received from Mr. COCKE, who *inherits* a love of the horse, a request to insert an advertisement of his horse, "Black Hawk," admirably adapted, as he conceives, to the propagation of an active and powerful race of roadsters. In the veins of Black Hawk, runs the blood of the imported "Sarpedon" and Gen. Cocke's "Roebuck," whose stock for stoutness and game, upon the road, is celebrated in Virginia. We take the liberty of inviting BLACK HAWK to the exhibition of the Henrico Agricultural Society this spring. Accompanying the advertisement we received the following communication:

To the Editors of the Southern Planter:

Gentlemen,—I send the inclosed notice of my horse for publication on the cover of your paper, (with suitable figure) to appear, *if possible*, with the forthcoming number—*i. e.* on 1*st of March*, to be continued for two months thereafter.

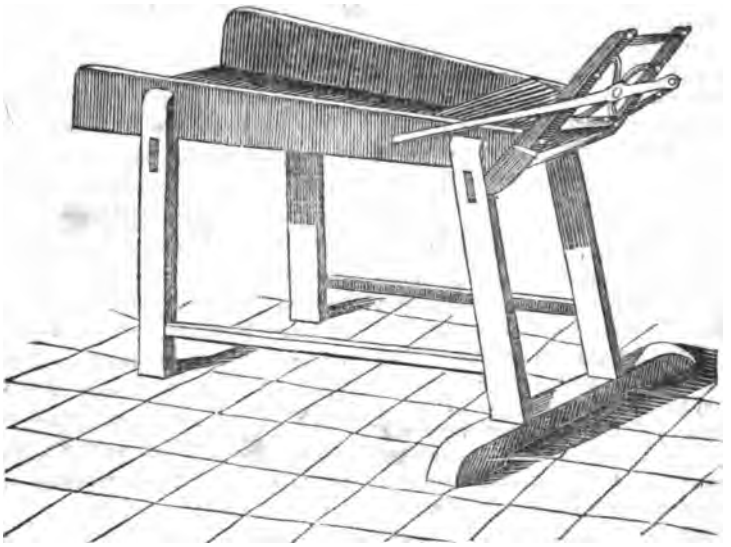
I will state in connection with the notice of the horse, that having, in common with most Virginians, a strong love of horses, but never having indulged a taste for the sports of the turf, my partialities led me some years since to commence breeding that noble animal for the more useful purposes of the saddle and harness, with the view of ultimately propagating a distinct race of roadsters, which, like the English Hunter, should be unrivalled under the saddle and in the light draught of pleasure vehicles. My plan has been to select mares of good blood, size and useful qualities, and otherwise particularly adapted to my mode of breeding—and to put them to the largest and best of the thorough bred horses of the State, and to cross and re-cross upon this stock until animals of the desired qualities shall be produced. I have at present some twenty or more mares—colts and stallions—from which I am breeding upon the

above plan. Many of the colts are very fine and remarkable for size—especially those of the second cross—and I have every indication so far of the final success of this plan of breeding, which was commenced and is prosecuted chiefly for the gratification of a passion for fine horses, but at the same time not without the hope that it may in the end prove of some public benefit.

Very respectfully yours,

PHILIP ST. GEORGE COCKE.

STRAW CUTTER.



Experience has long since demonstrated that there was no implement upon the farm productive of greater saving than a good straw cutter. Repeated experiments made at the North and reported with the greatest accuracy, have shown a saving of one-third to the farmer who cuts up all his long feed. Impressed with the absolute necessity for one of these machines upon every well managed farm, we have paid great attention to its construction, and had some months ago brought it to such a state of perfection, as not only to entirely satisfy ourselves, but, what was much more difficult, to satisfy the numerous purchasers of the article. In this satisfaction our northern friends partook in a very large degree, as was manifested by the award to us, last fall, of the first premium of the NEW HAVEN Agricultural Society, the third premium at ALBANY, where it was broken and out of order, the first premium at Philadelphia, where it was exhibited in competition with the very implements that were preferred to it at Albany, and again the first premium and a silver medal at the great exhibition of the AMERICAN INSTITUTE in New York, where it again met and defeated its Albany rivals and dozens of other competitors.

For this cutter, with the numerous testimonials of its durability, efficiency, and ease of management in our possession, we claim, without arrogance, the palm over every other made in Europe or America. But there is still one difficulty. To make so perfect a machine, with every facility of labor-saving machinery, with every disposition to accommodate our prices to the times, we are unable to furnish the cutter for less than *thirty dollars*, whilst we continue to make it up in a manner to sustain its well earned reputation; but we are constantly beset by small farmers, who think they cannot afford to give so much for a straw cutter, with the inquiry, "Can't you make us a cheaper cutter, which, if not so good, will yet answer our purposes?" To answer this demand, we have just

gotten up and patented an article upon an entirely new principle, which works to a miracle. It is represented in the engraving: it differs not very greatly from the usual form of guillotine straw cutter, in which a gate is made to work up and down by means of a lever, except in this, that the gate, instead of moving *perpendicularly* up and down, moves *obliquely* to the straw, so as to enter and run, as it were, with the grain of the straw. By this means, the greatest ease of cut is obtained. Let the reader go out to his wood pile, and throw his axe first perpendicularly and then obliquely into a log of wood, and he will have a pretty good idea of the advantage of this mode of cut. Again, when the gate moves perpendicularly up and down, there is a constant tendency, especially when the knife is dull, to force it off from the bed plate against which it cuts. By this means a wear and play in the gate is engendered, by which the cleanness of cut is entirely destroyed. If the gate moves obliquely the other way, that is, makes an acute, instead of an obtuse, angle with the straw, the mode in which we first tried it, this difficulty is greatly increased; but when the gate moves as in this cutter, the knife is drawn in by the grain of the straw, technically called "eating," and a constant cleanness of cut is ensured. These two advantages render this knife, which we can sell for *ten dollars*, superior, we believe, to any cheap cutter in use.

If thought desirable, a board may be set up in front at any required distance from the knife, as a guage, against which the straw, which is fed by hand, may be pushed, so as to regulate the feed to any length required.

To grind the knife, it is only necessary to turn a single screw, when the whole gate may be slipped out, and the knife may be ground without being removed. To small farmers and private stables in cities we believe this knife will prove to be exactly what has been long wanting.

BOTTS & BURFOOT.

For the Southern Planter.

SOWING CLOVER SEED.

Messrs. Editors,—You will please to order me four barrels of poudrette; I should like to get it this month. If you have any on hand, please inform me forthwith. I wish to try experiments with it during the present season, and should it answer my expectations, I shall deal more largely in the article in future. Your cutting box has saved me during the past winter, the price it cost me. Two hands can cut shucks, hay, or fodder enough for fifteen or twenty horses in ten or fifteen minutes with it. Your last number contains a drawing of a box for sowing clover seed, which I consider an useless piece of lumber. I follow the plan of my neighbor, Mr. Hewlett, which is to mix the quantity of clover, or any other seed, you may wish to sow to the acre with one bushel of moist (not wet) sand, and let the seedsman sow from his apron as he would wheat. It thus comes up uniformly and regularly.

Yours truly,

ROB. H. NELSON.

March 9, 1843.

For the practised and skilful sower, the plan recommended by Dr. Nelson is better than any implement that can be devised, but with any other hand, the box is invaluable in securing an even and equal distribution of the seed.

As to the CUTTER, we could add a hundred equally flattering testimonials to that of Dr. Nelson, who has been using his now for two or three years.

CREDIT QUOTATIONS.

We quoted from Tull, under the head of "Selections," in 5th number of our paper, on the subject of "Pulverising the soil." We find this same article in a December number of the New England Farmer, quoted from the Southern Agriculturist, which paper credits it to the Southern Planter as original. We protest against thus robbing the dead of its rightful dues.

American Agriculturist.

If the Messrs. ALLEN are as desirous to do justice to the living, as they are scrupulous of "robbing the dead," they will please state, that the article alluded to, was marked in the Southern Planter as a quotation.

For the Southern Planter.

Ppremiums

For the next Meeting of the Agricultural Society of Henrico, which will be held the last week in May.

For the best stallion calculated to produce stock for the saddle, harness or draught, the property of the exhibitor,			$15
For the best brood mare,	do.	do.	10
For the best male saddle horse,	do.	do.	10
For the best mule raised by the exhibitor,			5
For the best work horse,	do.		5

Committee of Award—Augustus Mordecai, D. W. Haxall and Poiteaux Robinson.

For the best bull, the property of the exhibitor, $10
For the best milch cow, do. 10
For the best milch cow, raised by the exhibitor, 10
For the best pair of oxen, property of exhibitor, 5
Committee of Award—Jacob Shook, Albert G. Hobson and Benjamin Franklin.

For the best boar, raised by exhibitor, $5
For the best brood sow, do. 5
For the best boar, the property of exhibitor, 5
For the best brood sow, do. 5
Committee of Award—Charles Marx, John N. Shields and L. W. Chamberlayne.

For the best buck, the property of exhibitor, $5
For the best lot of three ewes, do. 5
Committee of Award—Thomas S. Dicken, C. W. Gooch and William Carter.

For the best specimen of domestic wine, not less than one gallon, the production of exhibitor, $5
Committee of Award—R. B. Haxall, James Lyons and William D. Wren.

For the best specimen of ploughing, to be performed by the farmer himself with his own plough and team of two horses, $10
To which Messrs. Botts & Burfoot add a straw cutter at $30 and a plough at $10, 40
Committee of Award—Hill Carter, Randolph Harrison and Richard Hill, with authority to fill vacancies.

For the best corn sheller, Diploma.
For the best cutting machine, Diploma.
For the best threshing machine, including horse power, $10
For the best specimen of farming tools, axes, hoes, spades, &c. 5
Committee of Award—Corbin Warwick, H. L. Carter and George W. Bassett.

For the finest specimens of poultry, such as geese, ducks, turkeys, hens and chickens, a premium of $2 50 for each specimen.
Committee of Award—Thomas B. Bigger, A. Robinson, Jr. and Edwin Hill.

Stock and articles which have heretofore received premiums are excluded from competition.

☞ There is another list of premiums to be added to the above, chiefly for horticultural products, which we could not obtain at the time of going to press.—Eds. S. P.

We have long entertained the opinion, which we have frequently expressed, that a thorough knowledge of the mechanical part of his profession, was wanting in the southern farmer.—From a long experience in mechanical business, we are peculiarly aware of the advantages possessed by any proprietor who is thoroughly instructed in those arts practised by his subordinates. Although it may not be necessary for the wealthy farmer to submit himself to the drudgery of manual labor, we all know how important it is that his hands should be skilled in their several occupations. Even if he has a practical overseer, it is all important that the proprietor should be able to superintend his superintendent.

The captain of a ship prides himself on being able to handle a rope better than any man aboard, and scorns to give an order that he could not execute. So a farmer, from the driving of a nail to the turning of a furrow, should have no superior; this, with his better education and higher intellect, the master, with a little practice, will soon accomplish. Impressed with these opinions, and satisfied that no better test of a good farmer can be obtained than his ability to excel in that art which lies at the foundation of good husbandry, we have put at the disposal of the Henrico Society a CUTTER and PLOUGH, to be disposed of as advertised above. We are happy to say that already some of our most respectable farmers have entered their names for the contest, which will be, we are inclined to think, one of the most animating and interesting that has ever been witnessed in this country. One gentleman, a distinguished *writer* and a *celebrated* farmer, says he would enter, if the time of trial could be postponed, so that he might *learn to plough*.

TOMATOES FOR COWS.

It is not generally known (says the L. C. Advocate) that this vegetable is a superior article of food for milch cows. We have tried it two summers, and it is decidedly superior to any other vegetable we have yet tried. They add greatly to the quantity as well as to the richness of the milk, and give a rich golden color to the cream and butter, which is at least pleasant to the eye, even if the flavor is not so improved. We do not know, however, that they impart any richer flavor to the butter.

We have known a cow to refuse them when first offered, but soon became very fond of them; others, we believe a large majority, eat them greedily from the first. Thus far we have fed them only in the raw state; but if boiled with corn meal, say half and half, or two-thirds tomatoes, they will doubtless be far better.

To one who has a dairy farm, the cultivation of an acre or two in tomatoes would be repaid by greater profit than any vegetable we know. From one acre not less than eight bushels may

be gathered daily from July until frost. There is some trouble in picking them, but then nearly every farmer has children; his little boys—ay, and his big ones, too—would not be the worse for a little work. We should be glad to see the experiment tried on a larger scale than ours, and to learn the result.

SWEET POTATOES.

We observe that a correspondent of the "S. Western Farmer," in Mississippi, declares, that from a thorough trial he is fully satisfied that sweet potatoes, as a food for stock, are far superior to ruta baga, and that he believes they as far excel the sugar beet. Our early subscribers will remember that a northern emigrant declared, in the first volume of the Planter, that if the northern people could raise the sweet potato, they would abandon all other roots.

TO PRESERVE FLOWERS FRESH FOR A LONG PERIOD.

Procure a flat dish of porcelain; into which pour water sufficient to nearly fill it; in the water place a vase of flowers: over the vase place a bell-glass, with its rim in the water. This is similar to a "Wards's case," in principle, although different in construction. The air that surrounds the flowers being confined beneath the bell-glass, is constantly moist with the water that rises into it, in the form of vapor. As fast as the water becomes condensed, it runs down the sides of the bell-glass into the dish; and if means be taken to enclose the water on the *outside* of the bell-glass, so as to prevent its evaporating into the air of the sitting room, the atmosphere around the flowers will remain continually damp. This plan is designated the "Hopean apparatus." The experiment may be tried on a small scale, by inserting a tumbler over a rose bud, in a saucer of water.

Gardeners' Chronicle.

TOBACCO.

We were struck with the views of a distinguished planter of Cumberland, who was speaking to us a few days since upon the subject of the tobacco crop. He thinks, under the system that is now prevailing, it is destined to be the great renovator of our worn out lands, and that it will yet accomplish for Virginia what turnips have effected for the county of Norfolk, and British husbandry in general. He contends that it is not an exhauster, but that, being like the turnip a broad leaved plant, and being removed before it matures its seed, it draws its sustenance, in a great measure, from the atmosphere, and is, according to all established principles, an ameliorating crop. That the lands of our planters have grown poor, he thinks, proceeded from other causes than the abstract cultivation of tobacco. In the first place, our ancestors were too prodigal of the gifts of nature, and the treasures of the barn-yard were too long permitted to waste their sweetness upon the desert air. Secondly, when their successors were driven by necessity to the collection and use of manure, the tobacco planters concentrated all of theirs upon their tobacco lots, which, on account of their superiority, were immoveably devoted to this valuable staple, and that so far from the tobacco having exhausted, it is a notorious fact that the best part of every plantation is that which has been devoted to its growth. It is in fact the corn and oats, cultivated by this system without manure, that have exhausted the land. But, says our author, there is no crop, not even the turnip itself, that from the saving of manure that it induces, and the high degree of tillage it requires, forms as good a preparation for succeeding crops; and all that is wanting, as he contends, to demonstrate its value, is the new system, which makes every portion of the farm that is to be improved a tobacco lot, alternately; thus making a rotation, of which tobacco shall form a constituent part.

From the Connecticut Farmers' Gazette.

FOR CORN—A RECIPE.

Mix plaster, unleached ashes, and quick fine lime together, in the following proportions:—two parts plaster, two parts ashes, and one part lime, and apply a small quantity of the mixture to each hill of corn immediately after the first hoeing, and see if it don't go a "leetle" ahead of any thing you ever tried to make corn grow.—Be sure to leave one row without the application, "jest" to see the difference.

NOVICE.

THE SPIRIT OF THE TIMES.

This valuable hebdomadal has come to us this week accompanied by a spirited and faithful portrait of W. R. Johnson, Esq, which in after days will be worth a year's subscription to the paper. In this age of cheap literature, the Spirit of the Times stands "solitary and alone," a monument of what an Editor can afford to do

when he is liberally remunerated by his subscribers. The diversified character of this paper and the ability with which it is conducted, render it acceptable to all amusement-seeking classes of the community; the literary selections are made with great taste, and in some of the flash epistles of the sporting department, we have met with veins of humor as rich and genuine as are to be found in any cotemporary in the Union. High as the price is, we will venture to say, that the subscribers to this paper get more for their money than many, who think economy requires them to limit their patronage to a cheaper(?) work.

TO STOP A FIT OF COUGHING.

A correspondent of the London Medical Gazette, states that to close the nostrils with the thumb and finger during expiration, leaving them free during inspiration will relieve a fit of coughing in a short time.

In addition to the above we can state from personal knowledge that to press the finger on the upper lip just below the nose will make the severest premonitory symptoms of a *sneeze* pass off harmless. We have found the remedy useful many a time in creeping on game in the woods.

The following prescription may be relied upon. It comes from a source entitled to the highest respect. The old gentleman, who furnished it, says that he has known it cure travelling horses in a few minutes so that they were able, in half an hour, to resume their journeys and perform as well as ever:

"*Infallible Cure for a Foundered Horse.*—If your horse founders over night, in the morning take a pint of hog's lard, put it in a vessel and make it boiling hot, clean his hoofs well, set his foot in the lard. Heat it for each foot, boiling hot; take a spoon and put the fat over the hoof as near the hair as possible, and he will be fit for use in three hours if it is done early in the morning. It is better to remove the horse's shoes, but I have made several cures without. I have tried this on many horses during a period of fifty years, and have never known it to fail."

Louisville Journal.

EDITORIAL.

OUR SUBSCRIBERS.

A few of our subscribers are still delinquent, and two or three still owe us for last year.—About the 15th of April we shall make out bills, after which their doom to the payment of $1 50 will be irrevocable.

TO CORRESPONDENTS.

We have received and were desirous of publishing in this number a communication from BANNISTER, and sent it to the printer for the purpose, but he has just returned it, saying, they had no key in the office to "Bannister's" hieroglyphics. There are two or three lines that stump *us*, but we will try and copy it for the next number.

CONTENTS OF NO. IV.

Artichoke—Value of Jerusalem, and directions for its cultivation, p. 73.
Charcoal—Its value for agricultural purposes, p. 74.
Blue Grass—Its value, with the mode of management, p. 74.
Lice—To free cattle from, p. 75.
Corn—Advantage of cultivating double eared stalks, p. 75.
Wheat—Experiments upon the proper time of cutting, p. 76.
Coal Tar—How to use on roofs, p. 76.
Asparagus—New method of growing, p. 77.
Sweet Potatoes—Information asked, p. 77.
Corn—Result of an experiment *broadcast* p. 77.
Grubbing—A grab and a grubbing hook described, with a cut, p. 78.
Cucumbers—To obtain early, p. 78.
Tomatoes—To obtain early, p. 78.
Potatoes—To obtain early, p. 78.
Lettuce—To obtain early, p. 79.
King William Agricultural Society—Report of various experiments made by the members, p. 79.
Locust—The value of the timber, with directions for the cultivation of the tree, p. 80.
Charcoal—Directions for burning, p. 80.
Tools—Directions for tempering, p. 81.
Agriculture of Virginia—A letter from J. M. Garnett, Esq. in answer to "Vindicator," p. 81.
Ditching—Directions for making, p. 83.
Piny Old Fields—Directions for improving, p. 84.
Gate—Plan for steadying the post, illustrated with a cut, p. 84.
Dynamometer—Description of Mr. Cone's, p. 85.
A Table—Showing the number of hills in an acre at different distances, p. 85.
Fencing—A new plan of, p. 85.
Tobacco—A review of Mr. Minor's pamphlet, No. 2, p. 87.
Short Hints—By Argus, p 89.
Pedder's Frank—Notice of, p. 89.
Timber—Essay on, p. 89.
Tobacco—Seed received from Patent Office, p. 91.
Straw Cutter—New plan, with a cut, p. 92.
Clover Seed—How to sow, p. 93.
Henrico Agricultural Society—Premiums offered for spring meeting, p. 93.
Tomatoes—Good food for cows, p. 94.
Sweet Potatoes—Value of as food for stock, p. 95.
Flowers—To preserve, p. 95.
Tobacco—An improver, p. 95.
Seed Corn—Directions for preparation of, p. 95.
Spirit of the Times—Notice of, p. 95.
Coughing—To stop, p. 96.
Founder—Cure for, p. 96.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. III. RICHMOND, MAY, 1843. No. 5.

PASTURAGE *vs.* TILLAGE.

During the last winter we enjoyed the pleasure of a fireside conversation with one of the most intellectual and experienced farmers in Virginia. We made a note afterwards of the most striking remarks of our friend, and it is to the benefit of this memorandum that we propose to treat our readers. As a conversation, it was of course varied and desultory, and he who reads what follows with any expectation of finding an able and profound essay upon agriculture, will be sorely disappointed. But we wish we possessed the power of transferring to paper the zeal, the ardor, and interest, with which this gentleman, the builder of his own fortune, who has grown gray in the pursuit of his profession, dilated upon the joys, pleasures, and advantages of his favorite pursuit. How we who are mewed up in a city, from year's end to year's end, longed, while listening to him, for what old GERVAISE MARKHAM calls "country contentments." But it was not so much the poetical and sentimental ideas, as the practical remarks of our observing friend, that we intended to transfer to our columns; to these, therefore, we proceed without further comment.

This gentleman, himself an inhabitant of the West, is very familiar with the agriculture of the eastern portion of the State, especially with the James River cultivation. He thinks the great error of the East consists in the want of grass and cattle. He is free to admit that crops of wheat, corn, and tobacco, will put more money *in the pocket* than grass, but he says the cultivation will take more *out* also, and that into the account must be taken the revenue derived from the superior improvement of the soil, from pasturage over tillage. In short, he contends, that when the cost of production and all the proceeds of the system are fairly considered, products, which are consumed on the farm, afford by far the best remuneration to the labors of the husbandman. He says too, that the proneness of mankind to make improvident expenditures of money, for which our Southern people are so particularly remarkable, is in a measure checked by this system, which creates, as it were, a savings bank, in which their products are deposited; therefore, all that increase of wealth, which accrues from the improvement of the farm, may be offsetted, he thinks, against twice the amount obtained in *money*. Men mislead by the glittering, but false, show of the products of tillage crops, coming as it does all in a lump, too frequently miscalculate the *clear profits* of the two systems. He does not mean, of course, that every farmer should be a grazier, but he thinks that the farmers in Eastern Virginia would do well to incorporate the grazing system with their tillage crops to a much greater extent than they do. He himself sells very little except pork and beef; he cultivates a farm of seven hundred and fifty acres; his annual sales average four thousand dollars, and his force consists of only six able bodied negro men, and a couple of others hired for a month or two during the busiest season of the year. Here is a product of six hundred dollars to the hand; where is the tobacco planter that can equal it? But this is not all, in doing this our friend has converted a wilderness into a garden; beginning originally with two hundred acres of Ohio bottom, he has so improved hundreds of acres of sandy barrens, as to increase their product from five, to seventy-five, and a hundred bushels of corn to the acre; they are in fact now considered the most valuable portion of the farm. If this great increase of wealth be, as it fairly should, added to the amount of annual sales, and if the outlay be estimated by the smallness of the force employed, we do not hesitate to say, that the clear profits of this gentleman's farming will compare favorably with the proceeds of any other regular business whatever.

All this, and more, much more, he thinks, could be effected with its additional facilities upon a James River estate. He laughs at the idea of this not being a grass country—he has seen our lands at all seasons during the extremes

of summer heat and winter cold, and he says, it is impossible to persuade him, that land groaning under the weight of its products, as he has seen some of the James River low grounds, could not, by proper management, be made to produce anything. He thinks it likely that lime may be wanting in our soil, but where, he asks, is the difficulty in supplying it. It is an entire mistake to suppose that when our grass turns yellow, it has been destroyed by the summer heat; it is then, on the contrary, in its most nutricious state; succulent grass is never wholesome, and it is a standing proverb among graziers, "the dryer the year, the fatter the cattle."

When we commenced this article we expected it to consist, like the memoranda upon which it is based, of a medley of ideas, but we find that we have from memory so elaborated our notes, as to extend a single subject over a greater space than will probably be agreeable to the reader; we shall therefore conclude, for the present, reserving the balance of our notes for future occasions, premising, that we may hereafter introduce them without any further allusion to the source whence they have been obtained, which, as we are compelled to conceal the name of the author, will detract nothing from the interest of his remarks.

TIMBER.

To the Editors of the Southern Planter:

Dear Sirs,—In answer to the inquiries made by Mr. Whit'l P. Tunstall, whether timber lasts better cut in winter than summer, I should say, from many years experience, that winter is the proper time to cut most timber;* because, if cut in the warm season while full of sap, it immediately turns dark, (or as we term it, mildews,) and remains heavy even after seasoning. This is particularly the case with the pine. We in this section of the State, have been for some years in the habit of cutting wood for market, and so evident is the difference, that an experienced wood buyer will, on first sight, designate the wood cut in winter from that cut in summer; the former being light and bright, while the latter is dark and heavy, though cut more recently.

I should say that locust or mulberry is decidedly the most lasting timber for posts, or any thing else for which it can be made to answer; nor is good red cedar much inferior; the next that I know of is chesnut, particularly toward the top of the tree, which will last much longer in the ground than the lower part; and this is the only reason why it is said that a post set in the ground with the top down lasts longer than if the root end is set downwards, because the further you go up a tree, the more solid, dry and durable the timber becomes. This is especially the case with chesnut and oak. All timber placed in the earth should, if possible, be first seasoned. I should prefer chesnut to oak if it is to be placed in the ground. On the subject of the rising and falling of the sap, all that I can say is, that every year's sap adds a grain to the tree, for in all graining timber you can certainly see distinctly every year's growth, and that the sap of one year is the next converted into wood, which enlarges the tree that much in each year.

With due regard, yours,

J. Chowning.

Lancaster Co., Va., 10th March, 1843.

* Carriage makers say ash (and perhaps there may be some other timber) should be cut in May or October, as the worm will get into it, cut at any other time.

For the Southern Planter.

SORREL ERADICATED BY LIME.

Messrs. Editors,—The farmers, as a class, are the soundest and most original thinkers in the world; the nature of their occupation not only invigorates the mind, but affords them peculiar leisure and opportunity for reflection; the lone forest and the solitary field are undisturbed by the din and confusion that mark the place of congregated men, and the even tenor of their lives secures the certain exercise of sober judgment. Whence then arises the almost universal prejudice against the *science* of agriculture? Is it, as some would have us believe, only the groundless objection of ignorant and conceited men? For my part I am free to admit that I know many liberal and strong minded men, who turn with disgust from any scientific theory of farming. I do not mean to say that this is exactly right, but I do mean to assert that such men do very few things without a reason, and that they have grounds, and substantial grounds, for their prejudices; not that they have any grounds for prejudice against genuine science, which is only another name for truth itself, but that they have much reason to be dissatisfied with the counterfeit presentment that has been so frequently set before them. I am sometimes not a little amused at the pomp and solemnity with which the theory of some closet professor is heralded forth: the agricultural papers laud it to the skies, and the sober minded countryman, who refuses to embark his labor in it until it is established by time and experience, is stigmatized as an ass and a barbarian. What is the result? In less than a twelvemonth, the short-lived favorite is exploded by the discovery of some simple fact overlooked by the author of its being, but the ass is never exalted above the professor.

A few years ago we were told, that as alkalis neutralized acids, all we had to do, to destroy

sorrel, was to apply lime to the land, whereby the acid of the soil should be corrected. What a beautiful theory, exclaims the agricultural writer. How true says the newspaper editor. Well, sir, I had been fooled before by these ingenious theories, and should not have so much regarded all these exclamations, but actually a book, a whole book, was written upon the subject! Then, sir, I could no longer doubt, and I thought if there was any one theory in agriculture well established, it was, that lime neutralized the acid of the soil and prevented the growth of sorrel: my wife was full of the notion; we had a morello cherry tree standing in the yard, the fruit of which was uncommonly sour and very objectionable, she said, because it caused the children to make such ugly faces in eating it; lime, says she, will correct the acidity of the soil, and smooth the faces of the little ones. Lime was accordingly applied. The following summer we were disappointed at not finding the cherries as sweet as blackhearts, but my wife was almost sure they were not so sour as they used to be, and I am afraid she bored our neighbors a little in persuading them to her opinion. Jim, however, made as ugly faces as ever, which his mother declared was done in pure obstinacy, and she one day forced the little fellow to swallow without a distortion, until at length the efforts of restrained nature burst forth in a mighty screw, from which the poor boy's face has not recovered to this day. Ever since that period, she has denied the action of lime upon sour fruits at least, and when our friend, Dr. S., told her a few days since that the oxalic acid of the vegetable did not exist in the soil, but was formed in the growth of the vegetable, from constituents derived from the soil and atmosphere, and when our neighbor, Mr. W., who has limed and marled to a great extent, assured her that although his land had been greatly improved, the production of sorrel had been much increased by the process, he having frequently seen the sorrel growing most luxuriantly through the thickest layers of marl, she insisted on it that I should inform you of the fact. But as she did not tell me particularly to mention the story of Jim and the cherries, and as she is a constant reader of the Planter, perhaps you had better leave that part out.

Yours, G. P. * * * * *

We prefer letting our friend "catch it" to marring the piece by extracting the story of Jim and the cherries.

THE CORN CROP.

We have had occasion before to remark upon the incongruity of opinion as to the proper method of cultivating the favorite and familiar crop of Indian corn. That we can find no two farmers who can agree upon the simplest facts attendant on the growth of this indigenous plant, proves only how little of critical investigation has been bestowed upon the subject of agriculture. One tells you that the roots of the plant should never be disturbed, but that the surface should be kept clean with cultivators; another says that you cannot plough too deep, and that nothing is more invigorating than severing the roots. If you want a large return, plant thick says A, if you do says B, your corn will fire and you will not make half a crop. Pull off your suckers, cries one; sucker not your corn, says another, and so we have, upon each and every point, the most opposite and discordant opinions from the most practical and observing men. Much of this difference results, no doubt, from differences in soil, season, &c.; but still we find men living side by side, subject to exactly the same influences, differing totally upon points, that one would have thought experience and observation should long ago have settled. What can we do in this dilemma, but select from the heterogeneous mass such articles as we think best calculated to present the different phases of this many sided question to our readers? The following is an extract from a letter from Mr. Wm. Woodson, of Goochland, to the Editor of the "Farmers' Register." The plan recommended by Mr. "Woodson" is the one, we know, pursued by many of our most experienced and successful corn growers.

"Nearly every farmer has his own peculiar mode of cultivating corn; and if you think a description of mine will be of any service, I am willing to place it at your disposal. My plan is to prepare the ground, as near the time of planting as practicable, not by ploughing flush, but by listing. Three furrows are sufficient to form a list, the earth from the two last to be lapped immediately over the first, so that no hard or unbroken space may remain. When the lists are completed, they are checked at suitable distances. I prefer three feet each way, with one stalk or plant in a hill; and to plant the first of April, or as soon thereafter as possible. Early planting is very desirable. My mode of cultivation is as follows:—As soon as the young plants have fairly made their appearance, I cause the wing coulter (an implement with a narrow iron wing extending into something of a share, attached to a new ground coulter, which works deep and leaves only a small furrow) to be run very near the young corn; even if the plants are a little loosened, so

much the better. The first ploughing is with the lists; and the whole intermediate space is broken up, close and deep—as deep as one horse can draw. When this operation is finished, the next thing is to plough the land crossways; and so on alternately, with the same implement, during the whole course of cultivation, always running as deep as it will go. I continue the cultivation as long as practicable, even until the corn is tasseling and silking; and the ground should have a thorough working, at least every eight or ten days. It cannot be worked too much or too deep. When the soil is kept clean and well stirred, the breaking of the roots is an advantage instead of an injury. The benefit derived from a free admission of the air into the soil is incalculable; and the frequent stopping of the roots causes them to throw out numerous rootlets which rapidly imbibe the nourishment from the earth. In short, the great secret of raising a good crop of corn is to work early, work well, work deep, and work incessantly. Cultivate no more than you can cultivate thoroughly.—All beyond that is overcropping, and will not yield a profitable return. Fear not to work in dry weather, provided the cultivation has been conducted with regularity. Stirring clean land, however dry, adds vigor to the growth; but ploughing corn in the grass is death to it, in time of drought. I have said nothing about hoeing: I make no great use of the hoe, but it cannot be entirely dispensed with. I do not permit the grass to be cut up around the corn; it is better to smother it while young, by drawing some loose earth over it. This may be done by following after the ploughs, in the early stages of cultivation; and the soil will be left in a mellow state. The suckers should never be pulled up."

A NOBLE EXAMPLE.

We were informed by a friend a few days since that Mr. Moses H. Carter, of Henrico, who has a very fine bed of marl upon his plantation not only makes liberal use of it himself but throws his gates open to the neighborhood and invites his neighbors to share with him in this bountiful gift of nature. The gentleman stated that as he passed his gate that morning, he observed seven carts coming out of it loaded with the richest marl. We do not know Mr. Carter, but cannot help expressing the admiration such an act of liberality is calculated to inspire. A great many very distinguished advocates of agricultural improvement would not *do* half as much to advance its progress as this quiet and liberal country gentleman.

For the Southern Planter.

Oakley, Mecklenburg, Va., March 16, 1843.

Messrs. Editors,—Below you will receive the report of a committee, appointed to report upon the condition of the farm of Richard Russell, Esq., which it is requested by our club that you publish in your next number of the Southern Planter.

Yours, most respectfully, &c.

R. A. PURYEAR,

Corresponding Secretary of the Upper Hole and Corner Club of Mecklenburg.

The Committee appointed to examine Mr. Richard Russell's farm, and to inquire into his manner of conducting it, have performed that duty, and beg leave to report as follows:

Beginning at the house, we would highly commend the ample and comfortable arrangements about the homestead—his own dwelling and out houses, the servants' cabins, stables, &c. On leaving the hill, our attention was first attracted by his hog pen. It contained a fine stock of hogs, and there seemed to be every arrangement necessary for the production of a large quantity of manure of fine quality, but we were not a little surprised to find that one who had been pursuing this plan for two or three years, was, up to this time, unprovided with either shelter for his hogs or even a cabin for the feeder, who must of necessity spend most of his time at the pen. We would say that this is not in accordance with his other movements, and would recommend that he should without delay furnish sheds for his hogs and a cabin for the feeder. Going a little farther, we find a most ample and finely arranged prize, barn, and stable, and farm yard for his teams, all answering well the purposes for which they are intended. We found his farm houses of every description in good condition and were particularly struck with the neatness and economy with which all his matters were conducted, even down to the corn stalks and other materials to be converted into manure. His teams were in unusually good condition, and his style of cultivation neat and effectual; his ploughs and plantation tools were generally in good order, and as an example worthy of the imitation of the club, they were either in use or housed and carefully protected from the weather. He has for two or three years past been pursuing the progressive plan of manuring, and proposes, as speedily as his means will allow, to manure the entire surface of his plantation. This system we cannot too strongly recommend as the only feasible means of restoring our exhausted country, and furnishing the agriculturist with a fair return for his labor. In a word, the farm and all of its appurtenances presented the most

unequivocal evidences of a most diligent and skilful proprietor, whose example is well worthy of the imition of every member of the club, and of the community at large.

P. C. VENABLE.
WM. HASKINS.

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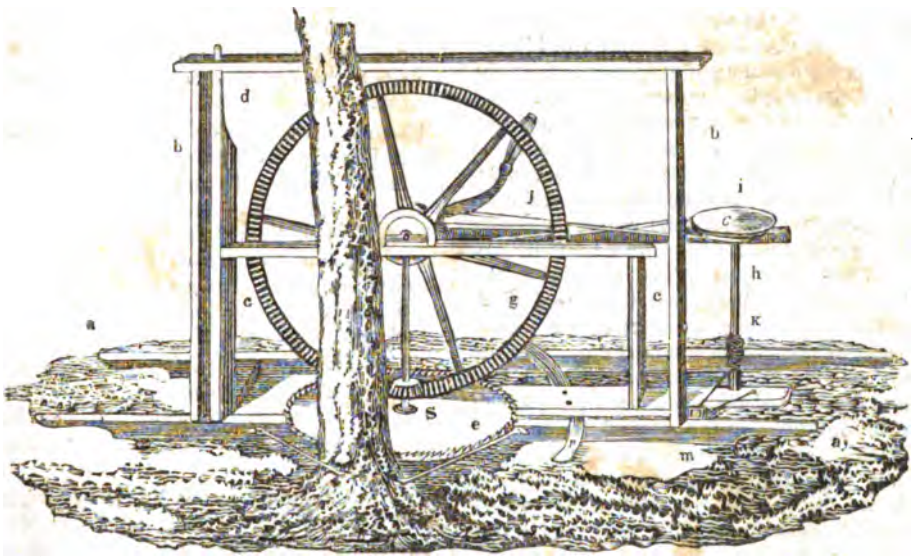
P. S.—To an invitation from the Hole and Corner Club of Mecklenburg, No. 1, addressed through the medium of the Planter, to all other agricultural associations, to hold an annual general meeting, we ask leave to reply, through the same channel, that such invitation is accepted by us, the members of the Upper Corner Club of Mecklenburg, and we would respectfully suggest the 4th of July as the time, and the town of Clarksville as the place of meeting.

Very respectfully yours,
REUBEN A. PURYEAR, *C. S.*

FELLING TIMBER.



At the request of a subscriber, we have had an engraving made of a machine which seems to have struck his fancy very much; it is intended for felling forest trees, and is recommended and described by LOUDOUN in his "Encyclopœdia of Agriculture." Our own opinion is that there is no implement for this purpose, that ever we have seen, equal to a good axe in the hands of a good cutter. Our friend thinks that this machine is recommended by the great saving of timber it will effect in consequence of the cutting point being so near the ground; it is very true that the best portion of the tree is nearest the roots, but there is, we think, very little timber in this country that would justify the expense and trouble of this complicated apparatus. Loudoun, we presume, never saw a common cross cut saw in the hands of two stout negroes, or he would not have recommended this machine, as he has done, to his readers. But far be it from us to set up our opinion as the test of right and wrong, or to exclude from our columns all that does not meet our approbation. The following is the description of the machine in Loudoun's own words:

"*Sawing machines for felling timber*, of four different kinds, will be found described in the *Highland Soc. Trans.*, vol. ix. p. 275. The most powerful of these appears to be a circular saw which consists, first, of a ground frame (*a a*), in form of the common hand-barrow, eight feet and a half in length by two feet and a half in width; on one side of which is erected a vertical frame (*b b*), of three feet and a half in height. The second compartment comprehends a traversing frame or carriage (*c c*) about five feet in length, and two feet in height; the ver-

tical bar (*d*) being prolonged upward, and having its top and bottom ends formed into pivots, on which the carriage, carrying all the working machinery, is made to swing. The saw (*e*), of twenty-four inches diameter, is fixed on the lower end of a vertical spindle, and immediately above it a bevelled pinion (*f*), which is driven by the wheel (*g*); the winch handle, by which the power is applied, is fitted upon the same spindle. The saw pinion and the wheel (*g*) are in the proportion of one to five, so that, when the handle is turned with the ordinary velocity of forty revolutions a minute, the saw will make 200 revolutions in the same time. In order to keep the edge of the saw in contact with the sawdraft, a vertical spindle (*h*), carrying the pulley (*i*), of one foot in diameter, is placed at the outward extremity of the carriage; the pulley (*i*) is put in motion by the band (*j*) passing over a smaller pulley on the winch axle. On the spindle (*h*) there is also fitted a small drum (*k*), capable of being disengaged at pleasure from the motion of the spindle by means of a clutch.—The cord (*l*), which passes round the pulley (*m*), in the ground frame, has one end attached to the carriage; while the other end, being attached to the drum, is coiled upon it when revolving along with the spindle, thereby carrying forward the saw with a slow and uniform motion. When the operation is completed, the small drum is disengaged, and the cord is allowed to uncoil, while the carriage is moved backward to prepare for the next cut. For the support and guidance of the carriage, an iron segment (*n*) is fixed upon the lower part, which slides through eyes in the ground frame; and the machine is kept steady while at work, by two iron dogs (grappling irons), the hooks of which are driven into the roots of the tree.—The certificates accompanying the model of this machine bear ample testimony to its successful application on the large scale; and show that it can be worked, and carried from tree to tree, by two men. The machine here described is calculated for felling trees from eight to twelve inces in diameter."

TOBACCO.

To the Editors of the Southern Planter:

Gentlemen,—I take my pen to thank you for the favor which you propose to confer on me, in the presentation of some tobacco seed of the Spanish and Trinidad varieties. I shall take great pleasure in testing fairly their respective value, and will apprise you of the results of my experiments. I will endeavor to get some friend to do me the kindness to apply to you for them.

While I am writing I will merely enumerate some of the varieties of tobacco with which I am acquainted, and the conclusions to which I have arrived, as it regards their comparative value.

The *Oronoko*, (to which family the "Daniel Jones" and "White Stem," I think properly belong,) is, I consider, the best tobacco we have, for new grounds, or light grey high lands, which are not very rich. It matures easily and well on lands too poor to perfect some of the other kinds. It requires, too, less skill in the curing. It cures by the sun alone better than any other tobacco, and commands the highest prices when cured in this way, for manufacturing purposes. As it requires less house room and less labor in curing, we are enabled to cultivate a greater number of hills of it to the hand, than of any other kind. Where fuel is scarce it recommends itself peculiarly. But on the other hand, it is the most brittle and tender of all tobaccos, and is consequently the most liable to injury from winds, which either break off the leaves (sometimes in great quantities) or bruise them so as to induce the ripe fire or spot, which causes great waste.

There are two varieties of the *Frederick* with which I am acquainted—the *Little* and *Big* or *Green*. The first has nothing to recommend it, being small and inferior; the last is a fine tobacco; one of the richest I know of, and the great length of leaf makes it present a most beautiful sample. The great objection to it is, that the leaves lie down too much on the ground, and are apt to get very dirty.

The popularity of the *Marine* tobacco which was very great a few years ago, is now, and I think, justly too, on the wane. It has large stems and coarse fibres and offers no claim to our regard.

The *Pryor* family stands deservedly high.—The *Yellow* and *Blue* are the kinds with which I am acquainted. The last is well spoken of by many of our best planters. But the first is my favorite of all the tobaccos which I have as yet tried, and the one which we principally cultivate. It is a leafy, rich, silky tobacco, and grows best on rich low ground lots, though it does well on high land lots if the soil is made very rich. It requires, I think, richer land to bring it to full perfection than any other kind, and consequently, it is useless to plant it on ordinary new grounds, for it will never ripen. It sustains less injury from high winds, when growing—is less liable to waste with the ripe fire, and produces fewer lugs than any other variety.* The two principal objections which

* As an instance of the perfect leaf and small quantity of lugs which the Yellow Pryor affords, I will only mention, that in our crop sold in the spring of 1840, consisting of twenty-three hogsheads of this tobacco—averaging 1,648 lbs. per hogshead, we had only a hogshead and a piece of lugs, all the rest was passed by the inspectors and averaged us upwards of nine dollars per hundred lbs.

can be urged against it is, that it is late, and that it requires more skill to cure it properly.—But when brought to the house *ripe*, and cured in Mr. C. Selden's way, (which is published in your number for July, 1842,) it commands the highest prices for the English market. His is the mode we have uniformly found to be best when our tobacco is ripe. But all tobaccos cut green, or designed for manufacturing purposes, are, I think, decidedly injured by so much heat. They are cured up too green and are too bitter for American taste; for these, I much prefer the mode of curing recommended by the majority of the committee of the "Agricultural Society of Powhatan," which report I would highly recommend to the attention of all our planters, and which renders it unnecessary for me to follow Mr. Minor into a consideration of this part of his subject. Indeed, Mr. Minor's views are very good, and well worth a careful perusal.

With these hasty thoughts, gentlemen, I conclude, wishing you that success which your noble enterprize so well merits,

I remain yours, respectfully,

N. A. VENABLE.

We have very frequent applications for tobacco seed, and would be much obliged to our country readers for such parcels of the different varieties as they can spare, that we may be enabled to accommodate our friends, and do something for the cause of agriculture, at the same time.

For the Southern Planter.

Messrs. Editors,—Permit me, through the medium of your journal, to call the attention of agriculturists to a system not in general use.—I would respectfully ask for it the consideration of the James River farmers, in especial. The merit of the innovation, if merit it possesses, belongs to Mr. Isaac Medley, of Halifax, Virginia; it has been adopted by some few of his neighbors, and by all with the most perfect satisfaction. Instead of narrow beds 10, 15, or 20 feet wide, we make them 40 or 45 feet. And instead of the *headland*, with its transverse furrow to receive the water from the main furrows, each main furrow is made to convey its own water into the ditch, direct. The advantages of this method over the old plan, are, in the opinion of those who have tried it, economy of time and labor, greater facility, of draining, and far greater comeliness in appearance. The first, because it does away with the headland and furrow, both objects of care and trouble; the second, because having only one-third the number of furrows, we can afford to bestow three times the labor on each; the last especially, inasmuch as it does away with the unsightly headland, which disfigures the field so much.

I have heard one objection to this system, urged with much unction by those who had not tried it, and if you will pardon the necessary tediousness of detail, I will endeavor to rebut it. It was said I could not plough near enough to a ditch bank, without the headland. I answer boldly, I can plough as near without, as with it, and thus; commencing on the centre of the bed, on arriving within, say, twenty feet of the ditch, instead of turning to the left as usual, we take the *gee* turn, that is, we turn to the right, and go back on the same bed, not on a different one; and so continue until there is left unploughed on each side of the bed a space of

feet in width. We then, on arriving at the ditch, cut a furrow parallel to it, and equal in length to the width of land, ploughed upon the bed. Pursuing this course, till the bed is completed, we will have reached as near to the ditch as can be done in any way whatever, always too turning the earth from it, a circumstance of no small moment to the planter. These are some of the general advantages pertaining to this mode of culture; for the hoe crop, it possesses another, which I conceive to be a beautiful feature in the system: thus, after ploughing our fallow land as directed, in the spring, we run our corn and tobacco rows across the beds, at right angles to them, and so work the crop throughout with the hoe; each hand as he reaches a furrow draws the earth carefully out, taking heed to preserve it perfectly straight.

Experience has given me confidence in this mode of culture, yet I fear I have practised upon it too indifferently to have rendered these advantages apparent. I can only ask that the experiment be made. It presents, when well executed, an appearance infinitely more pleasing to the eye than the old system, and surely it is entitled to the favor of every lover of beauty, for as much as it supersedes that eye-sore in agricultural landscape, the "headland."

I was never more forcibly struck with this deformity than in a late visit to a portion of James River above Richmond. Here, with almost every thing else to admire, we were constantly disturbed with the unsightly headland. To the surprising excellence of cultivation that we witnessed, permit me here to offer my most willing homage, a tribute as freely rendered, as it is richly merited. Striking the river at Elk Island, in company with a friend, we saw for the first time that superb estate, the finest perhaps in all Virginia: we were especially delighted with the highly improved condition of the lower half; without the labored finish that we witnessed afterwards, yet, as far as it went, the execution could not be excelled. All that was attempted was made perfect. The ploughing and draining were irreproachable. It was with the most sincere regret that we heard a few days afterwards of the burning of the man-

sion house; it was one of the most beautiful and classic country seats I ever beheld. Following the banks of the canal, our admiration was particularly excited by Mr. Bolling's island estate, Mr. Fleming's highly cultivated grounds, Mr. Warwick's 'Beaverdam,' and several others. But it was not until we reached Mr. Richard Sampson's, that our admiration reached its zenith; with but one objection, I can imagine nothing finer than the appearance his farm presented. Indeed, it is the opinion of those familiar with the countries of Europe, that there are few portions of it that can produce any thing superior to the better cultivated farms on James River, and I think we may safely so affirm, and I would pronounce that cultivation *perfect*, did not the ghost of that most hideous headland, rise before me, and forbid the decision.

BANISTER.

CABBAGE LICE.

We are requested by Mr. Jos. C. Burton, whose name is well known to the Agricultural Society of Henrico, to state that for several years he has been in the habit of freeing his cabbage not only from lice but from the ravages of the yellow worm, by simply mashing a clod of dirt between his fingers, and sprinkling the dust over the cabbages, in the morning before the dew has been evaporated. Mr. Burton leaves it to philosophers to explain the fact, but he says many of his neighbors are ready to join him in vouching for it.

For the Southern Planter.

Messrs. Editors,—I have been reading with much interest the several communications upon the cultivation of tobacco from the pen of Mr. N. A. Venable; I have been struck with some of his positions with regard to the mode of cultivation to prevent fire, (or rot, as he terms it.) The cause to which he attributes it, that is too much rain, I think correct; but to prevent its ruinous consequences, I resort to precisely the opposite course, namely, ploughing deep and thoroughly, so as to admit the rapid absorption of the water, which by his mode will either be altogether prevented or effected only at the expense of a gulley between each row, which must carry off all the strength of the manure deposited in the hill; if he will, on the first indications of the spot in tobacco run his coulters deep and well, both ways, so as to break the ground thoroughly, disturbing the roots of the plant sufficiently to cause it to flop in the sun, he will, nine times out of ten, arrest it altogether, and greatly increase the product of the crop. This I never fail to do after the crop is nearly all topped, taking the heat of the day, and substituting a pair of light stretchers, instead of the swingletree. I have been able effectually to divest myself of that troublesome insect, the cut-worm, by letting my hogs run in the tobacco lots for a week or ten days previous, to the last ploughing, before bedding or hilling; it will be found effectual in all cases, for I speak from experience.

This being the first time I have taken pen in hand, I shall not touch on some other subjects relative to the tobacco crop until I see the fate of this, as I have no vanity to gratify, only a wish to be useful.

Yours, A PLANTER.

Nelson, April 7, 1843.

It is always with reluctance that we publish any statement upon the faith of an anonymous signature; especially does it look unfair to answer a gentleman who writes over his own name, from behind a mask: but the author of the above has furnished us with his name, which he withholds from the public only, we believe, from feelings of diffidence, which he has no cause to entertain.

For the Southern Planter.

A CHEAP PAINT.

Take one bushel of unslacked lime, and slack it with cold water; when well slacked, add to it 20 lbs. of Spanish whiting, 17 lbs. of salt, and 12 lbs. of sugar. Strain this mixture through a wire sieve and it will be fit for use after reducing it with cold water. This is intended for the outside of buildings, where it is exposed to the weather. In order to give a good color, three coats are necessary on brick, and two on wood. It may be laid on with a whitewash brush. Each coat must have sufficient time to dry before the next is applied.—For painting inside walls, take, as before, one bushel of unslacked lime, 3 lbs. of sugar, 5 lbs. of salt, and prepare as above, and apply with a brush. It is well calculated to preserve brick walls; and is far preferable to oil paint. This paint will preserve rough boards much longer than they would be from dressing them and covering them with oil paint. You can make any color you please. For straw color, use yellow ochre instead of whiting; for lemon color, ochre and chrome yellow; for lead and slate color, lampblack; for blue, indigo; for green, chrome green. These different kinds of paints will not cost one-fourth as much as oil paints, including the putting on.

A BRILLIANT WHITEWASH.

Many have heard of the brilliant stucco whitewash on the east side of the President's house

at Washington. The following is a receipt for making it, with some additional improvement, obtained from experience. Take a half bushel of nice unslacked lime, slack with boiling water, covering it during the process, to keep in the steam. Strain the liquid through a fine seive or strainer, and add to it a peck of salt, previously well dissolved in warm water, three pounds of ground rice boiled to a thin paste, and stirred in boiling hot, half a pound of powdered Spanish whiting, and a pound of clean glue, first soaking it well and then hanging it over a slow fire in a small kettle, within a large one, filled with water. Add five gallons of hot water to the whole mixture; stir it well, and let it stand a few days, covered from dirt. It should be put on quite hot. For this purpose, it can be kept in a kettle on a portable furnace. It is said that about one pint of this mixture will cover a square yard upon the outside of a house, if properly applied. Brushes more or less small may be used, according to the neatness of the job required. It answers as well as oil paint for wood, brick, or stone, and is cheaper. It retains its brilliancy for many years. There is nothing of the kind that will compare with it either for inside or outside walls. Coloring matter may be put in and made of any shade you please. Spanish brown stirred in, will make red or pink, more or less deep according to quantity.—A delicate tinge of this is very pretty for inside walls. Finely pulverized clay well mixed with Spanish brown, before it is stirred into the mixture, makes a lilac color. Yellow ochre stirred in, makes a yellow wash; but chrome goes further and makes a color more generally admired. In all these cases, the darkness of the shade will of course be determined by the quantity of coloring matter used. It is useless to give particular directions on this point, because it is altogether a matter of taste. It would be best to try experiments on a shingle, and let it dry. I have been told that green should not be mixed with lime; the lime destroys the color, and the green has a tendency to make the wall crack and peel.

When walls have been badly smoked and you wish to have then a clear white, it is well to squeeze indigo plentifully through a bag in the water you use, before it is stirred in the whole mixture. If a larger quantity than five gallons is wanted, the same proportions should be observed.

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Messrs. Botts & Burfoot:

Gentlemen,—While on a trip to Maryland a few weeks ago, I met with the above recipes, which if you think worthy a place in your paper, you are at liberty to use. I think you would do well to urge your readers to use more lime on their houses and fences; it not only adds greatly to the neatness, but is extremely promotive of health. There can be no sort of doubt that it is a great preserver of timber, and the labor of putting on is but a small matter compared with the advantages derived from its use.

I saw several beautiful carpets manufactured of wool dyed of the most beautiful colors, the recipes for dyeing which I obtained and will send you if desired.

Geo. W. Craven

We esteem a good household recipe given in a few lines as frequently of more practical value than pages of fine spun abstract theory.—We hope Mr. Craven will not fail to supply us with the recipes for dyeing, and any other matters of household economy with which he may be acquainted.

For the Southern Planter.

MANURE.

Messrs. Editors,—I am pleased to see that your paper continues to stand high (deservedly so too) in the estimation of the farming community. Periodicals treating of agriculture, have generally contained too much theoretical and too little practical information, and my apprehensions were, when the Planter was first established, that it would, ere long, be devoted to the theories of wild and speculative minds; but so far, I am gratified to see, that such theories only are published as are capable of being tested by practice, which course I hope you will continue to pursue; since, I think it will prove more beneficial to you as it undoubtedly must to your subscribers. Although not a subscriber myself to your paper, since it is taken by a member of our family, justice requires me to say that I have read it with interest and profit, and as its pages are open to all interested in agriculture, I have taken the liberty of requesting your opinion on the subject of which I am about to treat.

My want of experience in the practical operations of farming (this being my third year) will, I feel assured, be a sufficient apology for any incorrect opinions which I may advance or advocate. My sole object is to elicit information, which no one, even with the experience of years, should hesitate to ask. The science of agriculture is rapidly engrossing the public mind; indeed it offers so extensive a field for investigation that the chemist in his laboratory, the philosopher in his varied pursuits, and the statesman in the legislative halls, are now forced to give it that consideration which its importance demands. The particular subject appertaining to agriculture, of which I propose to speak, is the mode of making and applying manure.—The manner in which manures act, the best

mode of applying them, their relative value and durability, I am aware, admits of much discussion, and in fact have already produced much, both in this country and in Europe; they will ever be debateable until the chemist has fully investigated the subject and his theories have been established by practical results. As it is not my purpose to enter into any arguments to refute or establish any of the different theories, which have been from time to time advanced, I shall merely state the method pursued here generally, and my reasons for adopting a different one. As I shall use the word fermentation frequently, it may be best before proceeding further to state briefly its definition. Berzelius defines it to be that spontaneous destruction which vegetable substances undergo when exposed to air and water. Sir H. Davy gives the same with the addition only "of a certain temperature." Liebig defines it to be that change which a compound organic substance undergoes when separated from its organism, and exposed to the influence of water and a certain temperature; indeed chemists generally have given in substance the same definitions, which may be stated as changes (with names corresponding, as vinous, acetous, &c.) which organic substances undergo when exposed to air, water and a certain temperature. The last of these changes or putrefactive fermentation we shall only speak of. It is acknowledged by chemists that plants can only be nourished by substances soluble in water, (elastic fluids excepted) the roots being then capable of appropriating substances so prepared to the nourishment of the plant. The chemical process above defined is that which renders vegetable substances soluble, and which we should ever bear in mind when preparing our manure heaps. Our principal sources of manure are wheat straw, corn stalks, and leaves, all of which are from time to time hauled to our farm-pens and stables, and trodden in the former until required for use, but piled from the latter at each successive cleaning. Our object here being to manufacture manure for our tobacco crop only, we have heretofore made only so much as we could, during the winter, commencing, say, in the last of October, and ending in April, laboring, as I conceive, under a great mistake, since double the quantity could be collected by littering our farm-yards during the summer, provided, however, such a course would not prove too disastrous to our stock, which, a little experience will very soon prove. The farmers here have pursued the above course, it seems to me, either from immemorial custom, or regardless of the process of fermentation, upon which the whole action of manure almost depends. Whether then would it be better, in view of the chemical changes, so far as ascertained during fermentation, to pursue the old custom, or throw the farm-yard manure into heaps long enough before using it to induce a certain degree of fermentation, and that from our stables into such as to retard it as much as possible? The latter mode I am in favor of, and am now adopting. I have left enough of my farm-yard untouched to try the relative value of the two methods. My objections to the old method, are, that we lose all the liquid manure from our stables by excessive fermentation, and the farm-yard is not sufficiently decomposed to afford nutriment to our tobacco when first planted. It seems to me both of them could be avoided by pursuing the plan I am now adopting. My stable manure is thrown into such heaps as not likely to produce much heat, and of course not liable to undergo decomposition; after my farm-yard had been well littered during the winter, and the litter as well trodden as possible, I determined a few weeks since to have it piled, and found upon examination many leaves entirely whole, even in the dampest places, though impregnated, I suppose, with the various excrements of the cattle, particularly the liquid. Seeing then so much vegetable matter undecomposed, and of course, unfit to be appropriated by the roots to the plant, my object was to form such heaps as to prepare enough by fermentation to give aid to the tobacco early in May; for which purpose, I directed several heaps to be made with layers of the coarsest at the bottom, as most likely to retain the liquid, upon which was thrown stable and farm-yard manure, intimately mixed, until a sufficient quantity had been thrown together, the whole of which was covered by fine manure; all of this was done for the purpose of producing fermentation, but not to excess. The chief losses in this method (as in almost all others I have seen recommended) consist in the escape of gases, the danger of too great fermentation, and the loss of the liquid manure. These may be, in a great measure, if not entirely obviated. The first by covering each heap with earth, say to the thickness of two inches.—Would not lime answer better? Much carbonic acid being evolved, the great affinity between it and lime would cause them to unite, and it would do equally as well as earth with respect to other gases, though this, we believe, is the most important one. The second is attended with great difficulty, indeed, to limit the degree of fermentation, we must make practical experiments, by a succession of which we may perhaps be enabled to come to some definite conclusion. The third and last, though of great importance, might be obviated by placing some good absorbent for the foundation of every heap, for example, saw dust.

It appearing to me all-important that tobacco should in its infancy have everything to favor its growth, as well as enough to sustain it while approaching perfection, I think the above method

will enable us to attain both results. The soluble matter obtained by slight fermentation will give it a good start, and the undecomposed vegetable matter by gradually becoming soluble under the earth, will nourish it until it attains its full growth. The plan here recommended, with this alteration, to scatter the manure from my stable over the litter in the farm-yard, I shall commence in April, using the lime and sawdust as above hinted at.

I have thus, I must confess, very unsystematically given my humble opinion with respect to making and using manure on tobacco, and shall be pleased to receive any modification or addition to this which you may see fit to advance.

Very respectfully yours, &c.

WM. H. JONES.

Mecklenburg Co., Va., March 19, 1843.

That a certain degree of decomposition is necessary to the action of vegetable manures, and that too great a degree is hurtful to their fertilizing properties, we conceive, with Mr. Jones, to be a settled point. That stall manure thrown into piles for too great a length of time, becomes too much decomposed, and that the vegetable matter of the farm-pen is not sufficiently so, we know to be frequently the case. Therefore, we think Mr. Jones is very right in throwing his farm-pen manure into heaps, whereby heat and decomposition will be produced, before carrying it out. To prevent excessive decomposition, and to retain the precious gases set loose in the operation, we know nothing better than the interposition of layers of earth between layers of the manure.

As to the lime it is both a septic, and an antiseptic; that is to say, in small quantities, it promotes decay, and in larger ones, it prevents it. With respect to its chemical action, that of course depends upon the gases and acids with which it is brought into collision. These may vary extremely in different heaps. It is perfectly idle to talk about chemical action, until we settle the presence of *all* the chemical agents. As regards the carbonate of ammonia, now considered the most valuable product of the decomposition of vegetable matter, the lime would, we should fear, especially if by the heat rendered caustic, have such an affinity for the carbonic acid of the ammonia as to resolve it into its gaseous and irretainable form. Yet we know many experienced farmers, who think that the best mode of using lime, is to mix it in with their compost heaps.

To the Editors of the Southern Planter:

Gentlemen,—It has been remarked by one of the most observant planters in this section of country, that "clover without the assistance of plaster, so far from being an improver, is an exhauster of the soil." If this idea is correct,—of which I have no doubt,—would not our sandy ridge lands be more benefitted by turning under a thick coat of weeds while in the flowering state and well powdered with charcoal, than by the heaviest covering of clover which they would produce by the application of plaster? We have an inexhaustible resource in our piney old fields for the best kind of charcoal, the advantage of which, on our farm-pens and stable-floors has been fully and satisfactorily tested, not only by solidifying the ammonia, and thereby enhancing the value of the manure, but in the improvement of the comfort and health of the stock in consequence of its correcting all disagreeable effluvia. But I have not heard of its being applied broadcast on the growing crop of clover or weeds, as a substitute for plaster. Our distance from market and the great weight of the article, render the general use of plaster too expensive for our small farmers. Will Mr. Za. Drummond give us another one of his excellent communications on the subject, or any other connected with it?

In confirmation of the idea suggested by Mr. Venable in his last remarks on the culture of tobacco, that the crop was injured by ploughing, after the plants were large enough to take the rot, I would state, that my crop last year suffered less from the rot or spot, than that of any of my neighbors, (although raised on light sandy land,) which is solely attributable to its not having been ploughed after the commencement of the wet weather.

A YOUNG PLANTER.

Pittsylvania, April 4, 1843.

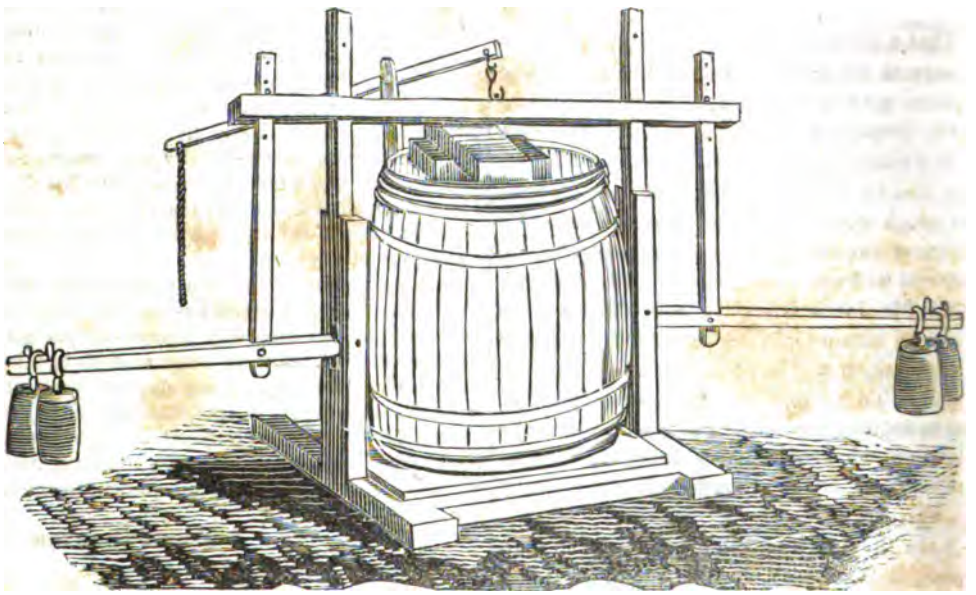
THE GRASSES.

We lately heard a gentleman, upon whose extensive experience we would rely with more confidence than upon the analysis of some chemists, state that cattle preferred and fattened on first timothy and herdsgrass, then orchard grass, and then clover which is probably the least productive of solid fat of any of the cultivated grasses. He moreover declared that instead of laying off pasturage grounds into separate lots, and shifting the cattle from one to the other, the whole should be thrown into one field, in which the stock should be allowed to range at pleasure. By this latter arrangement the cattle obtain free access to the grass in any particular stage of its growth that it may be preferred,

and when this is the case the natural sagacity of the animal leads him to correct the evil effects of the young and succulent grass with a bite of that, that is older and better cured. On the contrary, when they are suddenly introduced to a lot of untouched grass, all of the first growth, scours and distemper necessarily ensue.

By the bye, on mentioning this last statement to a practical farmer in our neighborhood, he said that he had long remarked, that when he changed his cows from the exhausted commons, in summer, to a choice grass lot, they were peculiarly liable to be attacked with distempers, for which he had never been able to account, before.

TOBACCO PRIZE.



The engraving represents a tobacco prize, a model of which was presented to us a few days since. We understand that it has given great satisfaction in Louisa, where it is beginning to be extensively used, and where they certainly know "a thing or two" about tobacco. The contrivance is so simple and so well illustrated by our excellent artist, Mr. HALL, as to render a description useless—the principle is very much the same with one described by Mr. Richard Morriss in the first volume of the Planter. The inventor thinks that there is considerable advantage in having the power to come down evenly and squarely upon the hogshead, as is here effected by the levers at both ends. He says too, that its portability is a great advantage, as it is frequently more convenient to convey the press from one house to another, than to transport the tobacco.

For the Southern Planter.

Messrs. Editors,—I see in the last number of your valuable periodical, a communication from "An Inquirer," asking information about the use of oil and soapstone as a *fire-proof* paint for the roofs of houses.

In painting my house a few years ago, this preparation was suggested for the roof, by a friend, who had used it a few months before, and as I was sometimes alarmed from fire, I procured the soapstone finely ground, and determined to make the experiment. While the paint was mixing, I had two loose shingles painted over,—one with the oil (linseed) and soapstone,

and the other with paint prepared in the usual way, in order that I might fairly test the difference between them in resisting fire. Having painted each over twice, and allowing them to become thoroughly dry, I had an equal number of fire coals heaped on each, and the result was that the one painted with common paint, burnt through a few minutes before the other, and that the fire laid on the other a good deal longer before it produced any impression on it. So much for the fire-proof qualities.

As an enduring paint, I doubt whether it is as good as the common paint, and I do not believe, from the present appearance of the roof of my house, that it retains long its powers of resisting heat. When first put on, a good deal of the stone is left on the surface of the shingle, and it is that fact which gives it its fire-proof qualities, but as time advances, this becomes drier and drier, and finally having lost its consistency, it is easily washed off by the driving rains, and exposes the shingle.

I am, in haste, yours, &c.

A SUBSCRIBER.

For the Southern Planter.

COMMENTS ON THE JANUARY AND FEBRUARY NUMBERS OF THE SOUTHERN PLANTER.

JANUARY.

Culture of Tobacco.—The remarks of Mr. Minor are generally very good, but I desire to put in a word or two. Why cover a plant bed before the second treading? It is mischievous and surplus work. After such clean raking, and so many coulterings and picking roots, I should never think of making a hill. If the nature of the ground requires raising, then the plough can be used; otherwise by marking off with a coulter, and making a chop and a clap, the job is done. As to hilling for the purpose of improvement, by enlarging the surface, I must enter my protest, for at this season of the year evaporation begins, and consequently loss must be the consequence. Walloon tobacco is often seen on high and dry land. It is the product of an acid, not water. There is no use for grubbing after cut-worms or abandoning the crop, where the ground has been ploughed in the winter, for such ploughing destroys the worms.

A Fence.—I fear this neat fence is rather slender for old Virginia negroes and hogs.*

Mud.—I go in for the mud, and every thing friend Morriss says about it. If the dung is on the route, I carry the mud to the dung; if the mud is on the way, I carry the dung to the mud; if matters are inconvenient, I spread mud alone.

Pumpkins.—I think well of this communication and intend to try the plan.

Plaster.—'Rusticus' is informed that sulphate of lime is not carbonate of lime, therefore, can be profitably used on it.

Mud, again.—T. M. S. says that "bog mud is too light and spongy to get out on land alone." In answer, I say, that for every load of spongy mud he will send me, I will give him two or three of heavy quality in return. If friend S. will only lay up his mud for a time, so as to suffer its poisonous qualities to escape, it is then ready for use, on any land of different quality.

FEBRUARY.

Tobacco.—Mr. Minor has too much handling of tobacco in the field. The handlers should pick up with both hands until full, and two may lay their hands together; and it is not necessary, except to save from frost, to put any tobacco into shocks. I have tried the plan of putting tobacco into the house immediately after cutting, and letting it remain crowded until of the color of a hickory leaf, but shall never try it again. Except in windy weather it will certainly house-burn. The continual hard firing is also objectionable, as any purchaser will tell you. This essay is generally good, but behind the age.

Clay Lands.—The spreading of undecayed vegetables and turning under matured crops, on clay grounds, as recommended by Mr. Allen, is well; but I greatly prefer for this purpose, dung of the most heating and fermenting kind. I have tried both often, and know that there is no danger of suffering loss by evaporation when the manure has been ploughed down and mixed with the earth. The remainder of this paragraph from Mr. A. is excellent, and will bear me out in every assertion. When speaking of the adaptation of particular crops to his peculiar mode of fall ploughing, I must confess that I do not understand him; but we perfectly agree as to the action of ashes.

Corn Hay.—The broom corn is far preferable to maize for this purpose, under any and every consideration.

Foot-Rot.—I never knew or heard of a case of foot-rot in Virginia.

Cultivation of Corn.—Mr. Young, of Kentucky, plants his corn invariably from the 20th to the 25th of March; but I guess he must vary now, for his day has come, and the ground is covered with snow, and stiff frozen. His corn rows are three feet by three, with four stalks in a hill, making 19,360 stalks to the acre—too thick for old Virginia; plants so thick that only one ear grows on a stalk—that is

* If necessary, a middle rail may be used, and then this fence, from the crossing and interlacing, will be so strong that even a thick-sculled negro may butt his head against it with impunity, (to the fence we mean.)—EDS.

right; covers six inches deep—sandy land, I suppose; knows nothing about re-planting—neither do I; runs the harrow over his corn rows—the front tooth out, I suppose; has rich land and makes great crops. This is the best part of the record.

Value of Urine as a Manure.—In Scotland it may be well to scrape up the loam from a field, then cart it to the feeding stalls, to be saturated with urine, then cart back to the field again; but in America we have abundance of lighter matters, which may thus be profitably used, and consequently a heavy item of expense avoided. Moreover I do contend that no ground should be scraped over, except for the purpose of levelling; for by scraping, the acid or raw earth is approached, which is mischievous to vegetation.

Corn Fork.—Where there are no stones, clods, or litter, this implement may answer a good purpose; but I should never think of mangling the roots of any corn at its last working by sending the fork so deep into the ground as recommended.

Value of Seasoned Fire Wood.—This is a valuable communication and should be attended to.

Founder.—A sweat is more efficacious, and less troublesome than the remedy mentioned. *A Thompsonian sweat.*

Cutting Food for Cattle.—Cut food is not only more valuable for cattle, but as manure it is ready at once for the shovel, the land, the plough, and the crop.

As my object is improvement, I may in my next comment on my comments, and hope I shall give no offence.

INVESTIGATOR.

March 20, 1843.

We think we speak the sentiments of our readers when we say, it gives them great pleasure to hear from "Investigator" at all times, and that no form of communication is more agreeable than the one he has now assumed.

For the Southern Planter.

BUCKWHEAT.

Messrs. Editors,—I have been a reader of your valuable periodical for nearly twelve months, and have during that time examined the pages of every number with much anxiety to find something from some of your numerous and able correspondents, upon the subject which stands at the head of this communication; but I have looked in vain. Whilst almost every variety of subjects connected with agriculture and horticulture has been discussed by those who have contributed so largely to the mass of important matter contained in the Planter, buckwheat has been, I believe, untouched. Is it because gentlemen are not fond of buckwheat cakes, but rather prefer the old-fashioned Virginia hoe-cake? I think, Messrs. Editors, that if many of your readers could sit down at the table of a Dutchman upon a cold frosty morning, they would not slight the hot smoking buckwheat cakes so much in *practice*, as they have in *theory*.

I have addressed you this communication not so much with a view to impart information in relation to this valuable grain, as to seek it; for I honestly confess I know but little about the manner of cultivating it. I would be much obliged to some of your correspondents if they would tell me in the first place what kind of land is best adapted to its growth. 2dly. How it should be prepared. 3dly. The quantity of seed to the acre. 4thly. The time of sowing. 5thly. The time of cutting, and how much it will turn out to the acre. I have understood that it would kill blue grass and greatly improve the soil; whether this is true or not I am unable to say. As the time for sowing must be near at hand, and I am so fond of the cakes, any information which might be given would be thankfully received by

Your obedient servant,

EDW'D G. SHIP.

Madison Co., April 4, 1843.

We have very little practical knowledge upon the subject on which our correspondent asks for information; but in the course of investigations made in his service, we met with the following, which we extract from the "American Farmer," one of the most practical and reliable papers with which we are acquainted:

"*Buckwheat* should not be sown before the last of June, and may be sown any time during the month of July. Its time of sowing should be graduated so as to bring its blossoming on at the period of early fall, when the weather begins to get *cool*, as it will not fill well in hot weather. When sown in the spring, the chances are against its yielding any grain, or, at most, but very little, and should, therefore, never be sown at that period, unless wanted, to be ploughed under as a green dressing, for which it suits most admirably, as it extracts a very large portion of its food from the atmosphere, and hence it is, that it will yield fair crops from very poor ground. If sown on suitable ground, loam, or moderately good sand, and the season proves propitious, it sometimes yields from fifty to sixty bushels to the acre. This quantity, however, is rarely produced, and it is safer to anticipate from twenty-five to thirty bushels to the acre. It is greatly assisted in its growth, and the maturing of its grain, by having a

bushel of plaster to the acre sown, and ploughed in with the seed.

"A very great advantage from the culture of buckwheat, arises from the lateness of the season at which it may be sown. It can be seeded after the wheat and rye crops are harvested, on the stubbles ploughed in and harrowed; thus enabling the farmer whose small grain crops may have proved light, or whose corn crop may promise badly, to grow a very excellent grain, and thus repair his losses.

"It should be cut when about half the grains on the heads appear ripe, and as it is easy to scatter, it is best to get it out with *flails*, on sheets, in the field, to prevent loss.

"Half a bushel to the acre is the proper quantity of seed to sow."

For the Southern Planter.

TOBACCO.

Messrs. Editors,—My attention was attracted by an editorial at the 95th page of the last Planter, in which you give to your readers some ingenious views derived from a visitor, with respect to the character and nature of the tobacco crop. That the cultivation of tobacco induces a clean tilth, is undoubtedly true; and that better means for saving and using manure, may, and must be resorted to, if we would preserve the fertility of our fields, I am not prepared to question; but that tobacco is not an exhauster, I am not ready to admit. Your friend argues, that because the tobacco is a broad leaf plant, and does not mature its seed, that, therefore, by all the rules of agricultural science, it must draw its sustenance from the atmosphere, instead of the soil; but he should have remembered that it is only prevented from maturing its seed by the artificial means of topping. It is a bold, vigorous plant, with a large and heavy stalk, remaining in the ground even beyond the time of perfect maturity, and nature, who cannot be always dragged into a co-operation with man, undoubtedly prepares, for the maturity of the seed, the sustenance, which the continued growth of the plant justifies her in believing will be required.

Our country has no doubt been much injured by careless and improvident management, but I cannot help thinking that the present state of barrenness, to be witnessed in many parts of it, is mainly attributable to the cultivation of this exhausting crop.

Your obedient servant, P.

WRINKLES.

We have a recipe to prevent wrinkles, not upon the human face divine, fair reader, but upon the horns of cattle. We are credibly informed that if cattle are kept always fat their horns will be perfectly smooth, and that wrinkles instead of denoting the years of life only mark the years of suffering and of poverty.—They are probably stamped by nature as an indelible monument of the cruelty and negligence of a bad farmer. Human wrinkles too arise in a great measure from a similar cause, and although not upon the same authority, we think we may venture to say that the best way to fight them off, or to delay them at least, is to laugh and grow fat.

For the Southern Planter.

VEGETABLE AND ANIMAL SUPPORTERS.

There are 5,500 species of plants in the vegetable kingdom, differing from each other in their organization, roots, stems, branches, leaves, flowers, fruits, odors, aliments and medicinal properties. This immense mass of vegetation, which adorns and beautifies the earth, is formed by the combination of five or six agents marvellously modified by the hand of God. Chemical analysis proves that all vegetables, from the largest oak, down to the smallest blade of grass, are composed of air, water, light, heat, carbon and metalic, earthy, or alkaline salts.

We propose making a few concise remarks on those great agents in the order they are named.

Atmospheric air is composed of every principle from the earth capable of assuming the gaseous form. These gases after being commixed, result in oxygen, nitrogen and carbonic acid gases; forming the fluid mass which supports the vegetable and animal kingdoms. This element is compounded of two opposite principles, the one the source of flame, animal and vegetable life, the other destructive to both, and producing by their different combinations the most diversified and beneficial effects. Atmospheric air effects the germination of seeds, the evolution and growth of plants—is the cause of fermentation, combustion and animal heat—preserves water in a liquid state—sustains the clouds, bears up the feathered race—the cause of winds, the vehicle of smell and sound, and is the source of all pleasurable sensation derived from harmonious music; it is the prime mover in most machinery—impels ships, blows furnaces, winnows and crushes grain—insinuating itself into the pores and sap vessels of plants, and produces respiration in all living beings—whilst it is at the same time actively engaged in decomposing all inanimate matter. So that this fell destroyer, and life preserver, is continually acting on the vegetable and animal kingdoms, producing their evolution and growth, and performing many thousand agencies of minor im-

portance. It is elevated many leagues above the earth, and fills the deepest subterraneous cavities—being invisible, insipid, inodorous, ponderous and elastic—of extreme rarefaction, obedient to the slightest motion, the least percussion deranges it, and its equilibrium, which is continually destroyed, is continually endeavoring to restore itself. Philosophers have made, with success, a number of experiments on the elasticity of the air, and it has been applied to the greatest advantage in the arts. Atmospheric air is navigated and journeys of one hundred miles performed in an hour! The time probably is not far distant when aerial voyages will be made across the Atlantic; such an idea is only absurd because the journey has not been performed. Should such an event occur, it will cease to be a novelty, and will not be regarded more than steam navigation or the growth of our crops. There is more mystery in the evolution and growth of plants, by the agency of air, than there could possibly be in a line of balloons wafted by this element from continent to continent. And why? Because we are acquainted with the laws of aerostation. Balloons inflated with hydrogen gas, twelve times lighter than atmospheric air, will rise, and nothing is wanting but air rudders to direct their course. Now I would respectfully ask, if we have as much information as it regards the growth and evolution of plants by atmospheric agency? Mr. Holland, a gentleman of scientific habits, has strikingly signalized aerostation of our day, for he traversed the continent of Europe in eighteen hours. His balloon rose from Vauxhall Gardens (London) November 7, 1836, at half after 1, P. M. and passed over Kent, Canterbury, the British channel, and reached the continent three thousand feet above the level of the sea. Thence, passing over France, Italy, Germany, &c. he alighted in safety at half past 6 the following morning, two leagues from Wellburg in the grand Dutchy of Nassau. See Blackwood's Magazine for 1836.

The weight of this fluid on every square yard of earth, is not less than twenty thousand pounds, and its pressure on our bodies twenty tons; which would crush us to atoms, but for its internal spring or re-action. Without air, the vegetable and animal world is extinct; there could be neither rain or refreshing dews to moisten the face of the earth, and the globe again would become a chaotic mass.

GALEN.

REPORT OF THE COMMISSIONER OF PATENTS.

Mr. ELLSWORTH has introduced a new feature into the annual reports of the Commissioner of Patents. He has undertaken to collect and furnish to Congress some agricultural statistics, from which we propose to make a few extracts. Although we give Mr. "Ellsworth" entire credit for the labor and industry he has exhibited, so very deficient and erroneous do we conceive his estimates of different agricultural products in different States to be, that we esteem it labor lost, and lay it aside as rather calculated to mislead, than to enlighten. "With all means and appliances to boot," it would be next to impossible to ascertain the amount of the varied products of this vast country. The miserably defective reports of the census takers of 1840, are taken as the basis of Mr. Ellsworth's calculations, and though his ingenuity and research have enabled him to detect some of their grossest blunders, we verily believe it would require a lifetime to correct one half their errors.

But over and above these statistics Mr. Ellsworth embodies information upon several subjects of general agricultural interest, from which we extract some views upon the subject of

SILK.

Mr. Ellsworth thinks that the prejudice against this product, resulting from the multicaulis mania, is rapidly yielding to sober judgment, and that the business is yet destined to be an important one to the country. The difficulties incident to all beginnings are rapidly yielding to information and experience. The energy and intelligence of our people are proverbial, and if circumstances favor us, as Mr. Ellsworth thinks there is no doubt, that the Yankees will grow and manufacture the article in its highest perfection. The production, it appears, doubles annually. The South, says Mr. Ellsworth, on account of its climate, affords peculiar facility for conducting its culture, and there is little doubt that it will one day, and that an early one, form one of our great staple productions.

"The American raw silk, it is perfectly established, is in quality superior to the foreign article. A person for many years, as he declares, engaged in weaving of silk in different establishments in London, having had (as he says) for fifteen years from 250 to 300 lbs. of silk of every grade and name passing through his hands, weekly, expresses the following opinion as to the silk, &c. of our country."

"I am qualified to affirm, from various experiments I have tried, that the silk is superior to any I have seen, from Italy, China, France, Piedmont, or Valencia; where the worms are fed upon multicaulis, or Italian. Its brilliancy,

strength, and scent, are superior. I am aware that exposure to the saline air, in the passage across the ocean, may be the cause of the loss of fragrance to imported silk: but the *brilliancy* is peculiar to American silk; if reeled in proper manner, with cleanliness."

That the silk business has proved a disastrous failure with several of our acquaintances, judicious, managing men too, we know; but this by no means proves that it may not be ultimately made very profitable. The truth is, that induced by expectations of exorbitant gain, men rushed into the business without experience, skill, or information, what was to be expected when they had to contend with those that had all three?

We make the following extract from a letter received from a correspondent:

GRUBS AND COLIC.

It may be of interest to some of your readers to know that the remedy spoken of in one of your numbers for last year, (not having the paper at home I cannot refer to it) recommending rubbing the big vein in the neck with spirits of turpentine for either the colic or bots in horses, has been tried by me in a very violent case, with entire success, giving relief in about thirty minutes. I rubbed the spirits also between the upper lip and the gums. I believe the disease to have been the bots.

I read, with interest in your December number, the reasons assigned for abolishing the bearing-rein in work horses, and mean, so far as I am concerned, to abolish it forthwith as being a useless and painful appendage.

In haste, M. L. SPENCER.

BOMMER'S MANURE.

The claims of Mr. GEORGE BOMMER to the discovery of a process, by which masses of vegetable and other matter can be readily and cheaply converted into manure of the most fertilizing qualities, has attracted much attention in the agricultural world, for the last twelve months. We were disposed, at first to ridicule it, as one of the numerous humbugs of the day; we never doubted the value, if we could have been assured of the authenticity, of the discovery. When, therefore, we were at the North last fall, and heard Mr. Bommer spoken of as a scientific gentleman, and any thing but the charlatan we had imagined him to be, we were induced to inquire farther into a subject which was likely to prove so interesting to our readers. We met with many who had purchased the right, and who anticipated the most beneficial results, but with none, who had had an opportunity of reducing the experiment to practice. After our return, attracted by various favorable notices in the northern papers, we were requested frequently by our subscribers to ascertain the particulars of method, price, &c. Accordingly, we opened a correspondence with Mr. Bommer, the result of which is, that he has appointed us his agents for the State of Virginia, and we are now prepared to dispose of the right of using this invention, with full and particular directions, upon the terms indicated below.

Manure is the farmer's sheet anchor, and he who affords facilities, whereby its production may be increased, is certainly in a fair way to rival him, "who causes two blades of grass to grow where only one grew before." But his increase of quantity is not all; the capability of getting up a pile of manure in a few days, just where it is wanted, presents advantages almost incalculable in its consequences. The foreign substances (by which we mean those that the farmer would have to purchase) necessary to convert one thousand of straw into four thousand of manure, will not cost more than fifty cents.

We make the following extract from Mr. Bommer's statement with respect to his invention:

This invention is the fruit of many years of exertion and chemical labor, and the result of repeated and various experiments.

The secret of the invention to make the manure, is accurately described and specified in my method secured by patent. The preparation of said manure is very simple and easy, and every farmer, by following my method, can exactly count upon certain success.

This manure is a composition of animal, mineral, and vegetable substances, consequently designed by nature for the nutriment of plants.

We may, therefore, abandon for the future, the partial use and application of every kind of merely stimulating manure, such as lime, plaster of Paris, ashes, &c.

The merit of my method essentially consists in the following important points:

1. In being able to reduce in a short time all kinds of straw and ligneous weeds to a rich, unctuous and durable manure, such as wheat straw, barley, rye, buckwheat, and other black grains; stalks of Indian corn, rice, and other plants; dried or green potato tops, leaves, stalks, and roots of all kinds of plants; green or dried seeds, green rushes, sea-weeds, sea-rushes, hea-

ther-broom, stubble, in fact, every thing belonging to the vegetable kingdom, and a great many other things lying about farms which are often allowed to go to waste. Even the ground itself may be converted into the best manure or compost.

2. In the combination or alliance of fecundating substances, the use of which, when separated, would not and could not produce the desired effect.

3. In the production of a very considerable quantity of factious water, which, when combined with other ingredients, forming lees, furnishes the farmer with a fertilizing liquid, the commixture of which in either vegetable or mineral substances, gives a manure of the richest kind.

4. In the production of a quantity of nitrate of lime and caustic potash; of ammonia and saltpetre—four substances which modern chemistry has found to contain the most fecundating properties possible.

N. B.—Nitrate of lime and caustic potash are formed by the mixture of ingredients composing the lees, as chemical analysis will easily demonstrate. Ammonia and saltpetre are produced by the lees combined with hydrogen and azote thrown off by the high fermentation of the mass. The existence of the first is made known to the senses by the strong smell of ammonia when the heap is opened.

From all this it is clear that my method employed on farms, offers the following advantages:

1. That those who have straw will be able to change the same into manure immediately after the crop is housed, or at any required time. Those who have not straw may use any green or dry substance instead; and that those who have neither straw nor the substance above mentioned, may change the very soil itself into a very good earth manure, and in any spot they may choose.

2. That a farmer can make with the greatest ease, in a few days, earth manure, or compost, which will answer all the purposes of animal manure, and excel in their fecundating properties all other ordinary composts, which by other means can be had hardly in one year, more frequently only in three years. That this earth manure may be used in the spring to quicken the growth of seed that has suffered from the rigors of the winter; to manure wheat previously sown without manure; it will be a great benefit in planting Indian corn; for top dressing of artificial and other meadows; it is of the greatest use in gardens, mulberry and other fruit trees, keeping at once the ground moist and producing rapid vegetation.

3. That the farmer will have the advantage of being able to make his manure heaps when, where, and as he pleases; he will be able to open them when they are in heat without losing any of the fecundating moisture.

4. By means of the lees, which this method will inform him how to make, it will be easy for him to give to his farm-yard manure more invigorating properties, and he may increase its bulk at pleasure. Farm-yard manure, in fact, should be used only as the leaven to make the different heaps required.

5. By the great quantity of moisture entering into the materials, the weight of such of them as are dry, will be increased fourfold; that of the others is more than doubled.

6. This method enables the farmer to control entirely his manure heaps; that is to say, he will be able to make them in all their parts equally good and fertilizing. The lees, which distribute the saline and soluble particles in a regular and uniform manner, will produce an even crop throughout the field.

7. By the high degree of heat to which in that course of making it attains, the germinating power of all weeds found in the materials thus submitted to decomposition will be utterly destroyed. Hence manure made after this method never re-produces weeds.

8. The farmer will also be able to graduate his manure. He may have it of any degree of strength he wishes. This will enable him to forward the growth of plants in a manner hitherto unknown.

9. By means of manure thus graduated at will, market gardeners will have their produce much earlier in the market than heretofore.—They will be able also to heat their hot-beds anew by means of the lees without disturbing the frames.

10. In fine, the lees by which the manure is made, are prepared cold and without any previous chemical preparation; the majority of the ingredients may be found at hand on almost every farm, and cost nothing; and water, which is the basis of the system, is of no more expense. All here concur to render the method truly economical. Such are the principal grounds on which the system is recommended.

My method rests solely upon facts which are the results of numerous experiments. I have explained it in simple terms, without making use of any technical expressions; it is as easy to understand as to put in practice. Thus clearly and simply detailed, I present it to the public, having proved, by repeated public experiments in presence of enlightened farmers, that all I have said is true, and that the advantages to be derived from its adoption are real, and not visionary.

To conclude—as this method is my property, secured to me by patent, I hereby give notice, that the pamphlets of my "Method," are all signed in my own hand-writing, and sealed, and can be obtained only of myself or my agents, authorized for this purpose, and that every me-

thod circulated or sold by any other persons, I declare false and counterfeit.

To facilitate the purchase of the Method, the price is fixed at the following exceedingly moderate rates:

For gardens of any extent,	$6
For farms, under 200 acres,	10
For farms, from 200 to 400 acres,	15
For farms, over 400 acres,	20
For plantations of any extent,	25

For this small sum, the method becomes the property of the purchaser, for his own use forever.

The application of this system is very simple, and the process plainly explained in my method; but if any one of the purchasers should meet with any difficulty in its application, or should not realize the results that this method offers, they may apply to me for the instructions necessary in order to a complete success in the operation. If there should be a final failure, which has never yet occurred, the purchase money shall be restored.

GEORGE BOMMER.

The following commendatory notice of this valuable discovery, is from Professor Eli Ives, M. D., one of the Vice Presidentt of the United States Agricultural Society:

"I have examined the pamphlet of Mr. Bommer on the subject of manufacturing manure. His method is founded on correct philosophical principles, agreeable to those recently advanced by Liebig. If the farmers can be induced to purchase the right, and thoroughly execute his plan of making manure, in my opinion, it will very much increase the value of their farms.

E. IVES.

New Haven, Feb. 11, 1842."

The Connecticut Farmers' Gazette for December, published at New Haven, contains the following certificate:

"I hereby certify that, having made repeated trials of Mr. George Bommer's method of making manure by fermentation, and having tested its effects in the rapid decomposition of the mass to which it has been applied, and having also witnessed the influence of the manure made by this process, in promoting the growth of vegetation, I am prepared to regard the invention as an important accession to the farming interest; and, although, having tried other modes of making manure with varied success, I am free to acknowledge that I have never been acquainted with any system of the kind that would compare with this for utility.

ERASTUS DUDLEY.

North Guilford, Nov. 23, 1842."

The Editor adds—"We are well acquainted with Mr. Dudley, the author of the above certificate, and we know him to be a man of sterling integrity. He is an intelligent farmer, and not likely to be imposed upon by every *new thing*. Inasmuch as he has tried Mr. Bommer's method, and gives his unqualified testimony in its favor, we have no hesitation in commending his statement to the confidence of the public."

Certificates from intelligent farmers might be greatly multiplied, but we consider them unnecessary.

For the Southern Planter.

THE SEASON.

Messrs. Editors,—Perhaps you would like to contrast this present spring weather of yours with that which we are now enduring.

Fancy if you can, that as I sit and write, I look forth upon one broad expanse of snow—no sudden fall of a few inches, but some good old substantial stuff that has been with us since the middle of November. Such a winter was never known here before, since white men knew the country. And the severity of it has been fatal to great numbers of cattle. Food of every description for stock is nearly exhausted, and no immediate prospect of relief. Oats for seed are already sown in the insatiate maws of our starving beasts, and when it does come seed time, many will be unable to sow. It is also feared, that the great burthen of snow that fell upon the wheat before the ground was frozen has smothered the greater part of that. If so, it will be a heavier blow than the loss of cattle, for wheat is our great staple.

Please give us the sunny side of the picture, in contrast to this. Let us hear that there is a land where grass grows in the spring.

Most respectfully, &c.

SOLON ROBINSON.

Lake C. H., Ia., April 7, 1843.

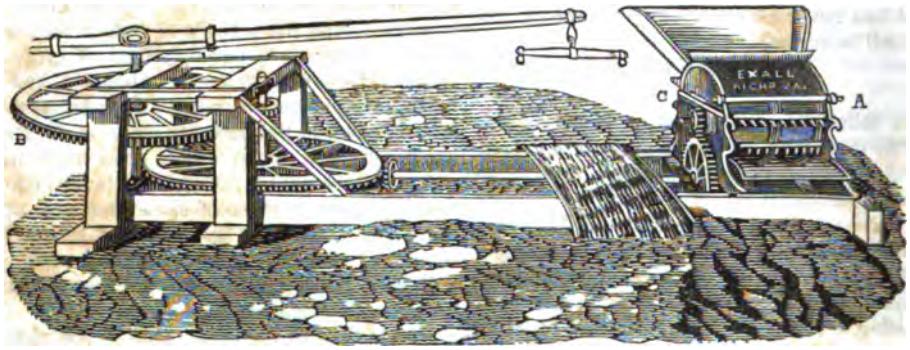
Matters are not quite so desperate with us as described by our respected friend in Indiana.—Although we had some spells of uncommon cold, we had a great deal of mild and beautiful weather during the winter. But our spring has been extremely backward; until within a few days past, the elements have amused themselves with spouting snow, sleet and rain, darting a few rays of the sun between, at lengthened intervals. The season is fully six weeks behindhand; oats, which should have been in the ground in February, are now (the 25th of April) just sown. We presume that with a majority, corn is not yet planted, and some have hardly had an opportunity of breaking up their corn land. From what we can hear, however, the wheat is not unpromising, and the corn may yet do well: the oat crop, we should think, must necessarily be a short one.

But now for the other side of the picture.

The dallying spring has come at last, arrayed in all her charms; the grass has sprung, the buds have burst, the blackbird is rocking on the tops of the poplar trees, carolling and revelling in the soft beauty of a summer morning: all nature is vivified and refreshened, and you see the joyousness of returning spring impressed upon the glowing countenances of men. We sincerely wish that our friend's eye, suffering so long from the glare of his northern snow, could be relieved by a view of the beautiful green with which, within a few days, nature has clothed our woods and fields.

We shall always be pleased to hear from so distinguished a friend to agriculture, as Mr. ROBINSON, if it is only to be chilled by a record of the weather in his inhospitable region.

EXALL & BROTHER'S THRESHING MACHINE.



The above engraving represents one of Exall's Geared Horse Power Threshing Machines. It is complete and ready for use. It is made in the very best manner, of the best materials and warranted to do as good work, and as much of it, as any other Machine in the State or out of it, with the same power. It has all the real improvements of twenty-five years' experience of one of the concern, with the addition of one or two important and acknowledged improvements recently made by the other. The whole arrangements of the gear and frame, and all other parts, have been well studied and carefully adjusted, to make it substantial and durable.

Some of the improvements to which we claim the patent right, and not used by any other Machine makers, are the following:

1st. The Horse Wheel (B) has the flange covering the top ends of the cogs to prevent their breaking. It gives great strength and is a decided improvement.

2d. The Drum is driven by a spur wheel, to the pinion of which, at (C) is a *ratchet*, which, let the horses stop as suddenly as they please, allows the Drum to run down in its own time, without dragging with it the Horse Power and Horses, as is the case with other Machines.

3d. The Drum frame is of cast iron, with oil boxes and friction rollers—oiling itself for a day at a time, without admitting the dust to the bearings. The friction rollers are large and well fixed, coming up through the bottom box, so that while the Drum is provided with good bearings, these rollers greatly relieve the friction and consequently the horses. The cylinder is the brace tooth, with bed to correspond, which is set on springs to relieve itself when over-fed. The teeth are wide so that they may be sharpened, and by reversing the ends of the Drum may be used on both sides and thus last twenty years. The Drum is set on a separate frame, so that it may be removed into a barn, if desired, and be driven by a band from the spur wheel at (C) which is in one minute made a band wheel by putting on it a hoop or tire (which is provided) to a pulley on the opposite end of the drum at (A). Thus it is adapted to suit all.

PRICES OF MACHINES.

The price of this Machine, payable in Richmond, is, for a 4 Horse Power which will thresh 300 bushels, $200; for a 2 Horse Power which will thresh 175 bushels, $175; delivered on boat, car, or wagon in Richmond. For a 4 Horse Power alone, $125; 2 Horse Power alone, $110; 4 Horse Drum alone, $75; 2

Horse Drum alone, $65. Stationary Machines put up on corresponding terms.

CERTIFICATES.

"*Aylett's, King William, Va.*, 1843.

"I have made many Threshing Machines within fifteen years past, and now thresh 2,000 bushels and upwards of grain per annum, for myself and neighbors; and I take pleasure in saying that I have never used, or seen, so good a Threshing Machine in all its parts, as one of Exall's, which I recently examined at their Machine Manufactory in Richmond. It possesses more good qualities than any Machine I have ever seen; while I cannot point out a single defect. The work is all good, and the Machine is cheap. JOHN SIZER."

"*Little Dover, Goochland, April 5*, 1843.

"My father, Dr. Joseph Trent, bought one of Exall's Threshing Machines more than twenty years ago, which was stationed in his barn at this place, and also one of his Portable Machines about ten years ago, and I take pleasure in saying that they have both proved all they were represented to be, and threshed out the crops of last year clean and well. JOS. G. TRENT."

Mr. William Miller, who was sent by the Henrico Agricultural Society to Albany, to attend the great State Agricultural Fair held there last fall, and examine such implements, &c., testifies that no Machine was there exhibited equal to the above, though many were presented; he having threshed his crop with one of ours, previous to his departure.

Many certificates might be added if space would allow. We solicit a share of patronage from the farming public, as we intend to devote the whole of this year to the manufacture of Threshing Machines. Those who favor us with their orders are requested to send them in early, so as to allow sufficient time to finish them before the threshing season commences.

EXALL & BROTHER.

☞ We will also furnish a good Machine, with Drum and Band complete, 4 Horse Power, for $150; and do. 2 Horse Power for $125; 4 Horse Power alone, $100; 2 Horse Power, $75. The last is on a different plan, very simple and warranted to work well, fast and easy. Shop on 12th Street, between D and E.

E. & B.

Richmond, April, 1843.

The subscriber will receive and execute orders for the above. C. T. BOTTS.

AGRICULTURAL CLUBS.

It is impossible to estimate the benefits that these neighborhood associations are privately and imperceptibly conferring upon the cause of agriculture. We have lately received several orders for new implements, &c., from such associations, who have purchased them for the purpose of testing their merits. This alone is an invaluable feature in their organization, which we esteem far beyond any society, whose object is public exhibition, no matter how extensive or how magnificent. One club in Albemarle has ordered one of Barnaby & Moer's ploughs; from another, in Mecklenburg, we have received an order for Poudrette. How much better opportunity will these gentlemen enjoy, at home, of testing an implement fully and fairly, and how much more satisfactory to the community will be their report, than any that could emanate from a committee, who are directed to decide in half an hour, frequently, upon the most complex piece of machinery.

This advantage alone, we repeat, by which the expense of purchasing and testing a new thing may be divided amongst a neighborhood, is calculated to have a wonderful effect upon the progress of agriculture, and ought to secure the establishment of such clubs in every squad of farmers. It is by means of this union and co-operation that information has been engendered and diffused in other occupations, and it is the growing popularity of this system, that encourages the hope that agriculture will not long be behind the other arts.

PRESERVATIVE COMPOSITION.

For a composition for coloring and preserving gates, roofs, and timber generally, from the weather, melt twelve ounces of rosin in an iron pot or kettle, add three gallons of train oil, and three or four rolls of brimstone; when they are melted and become thin, add as much Spanish brown, (or red or yellow ochre, or any other color you like, ground as usual with oil,) as will give the whole the shade wanted. Then lay it on with a brush as hot and as thin as you can. Some days after the first coat is dried, lay on a second. It is well attested that this will preserve plank for years, and prevent the weather from driving through brick work.—*Exchange paper.*

For the Southern Planter.

OLD FIELD PINES.

Messrs. Editors,—In the March number of the Planter there was a communication, from a gentleman of Amherst, on the subject of Old Field Pines, with which I was very much delighted. He states, that if the bark is stripped off while the trees are standing and suffered to

remain a twelvemonth, they will make as lasting posts as locust or any other timber. Having frequently observed pine trees accidentally skinned, coated over perfectly with turpentine, and knowing too, from experiment, that they could not be killed by belting, the first year, I was convinced of the truth and value of the statement in the Planter; and forthwith commenced the operation of skinning, and did not cease until I had literally "skinned alive" some two or three hundred trees. In a conversation with some of my neighbors, a few days since, I mentioned the subject and to my chagrin found they were perfectly incredulous, and disposed to laugh at me for my folly. Now, I should like to hear from the gentleman of Amherst, (Mr. Fuqua) whether he can avouch the truth of his statement, or whether he merely "told the tale as it was told to him." Has he tested the thing fairly?

If you can spare a corner for the above, you will much oblige

Yours, respectfully, J. R. G.

Henrico, April 5, 1843.

P. S.—In cutting the mortices in posts for fencing, after the auger, a light axe, with a long, narrow blade, is greatly preferable to the mallet and chisel. I am sure it expedites the work a third if not a half. J. R. G.

THE AMERICAN AGRICULTURIST.

This excellent periodical has just commenced its second year, with its typographical department much improved. As to the matter, it did not need, hardly admitted of, improvement. Mr. Allen, the Editor, is probably one of the most knowing *stock* men in America, and as a writer, his pen is particularly flowing, graceful, and easy. We commend this publication to breeders of stock, especially.

From the Plymouth (Eng.) Herald.

PRACTICAL DIRECTIONS FOR THE PLACE AND MANAGEMENT OF THE DUNG-HEAP.

Farmers have generally found out the advantage of having a dung-pit instead of a dung-heap; but still the rich drainage of the dung is much of it allowed to run away; the urine from the stables, &c. does not half of it run into the dung, though it is the best part, the essence of the whole; and the privy manure, which is better still, is mostly neglected altogether.

All drainings from the stables, cow-houses, and styes, should run into the pit, and the overflowings should be caught in another pit, to throw back in dry weather.

The following is a cheap and effectual method of doing all this:—When convenient, the pit should be on the north side of a wall, or of some trees, to shade off the sun; or under a shed, to keep off both sun and rain; but these advantages cannot always be had without too much cost.

Having selected the best place for your pit, first lay in way soil, peat, or any soil as different as possible from that of your farm, and give it a hollow surface, like a great tea-saucer. Upon this lay potato stalks, and any other vegetable matters, easy to ferment, and thereupon a layer of dung. Next a layer of vegetable matter, as peat, turf, bark, rotten weeds, ferns, leaves, or any kind of dead vegetable, to increase your quantity; and so every week, cover your dung from the stables, styes, &c. with three or four times as much dead vegetable matter; thus making up your heap in alternate layers. The urine should all run into the pit from stables and all, by narrow drains, where it will not be much exposed to evaporation; and another such drain should lead from it to a lower pit, to catch the overflowings when there are any; and keep them to throw back upon the dung in dry times. This lower pit should be deeper and smaller than the other, and must never be allowed to overflow, as that would be waste. It may contain cabbage stumps, and other things difficult to work, which may be thrown back upon the heap as they rot.

The lower pit may be used as a store of liquid manure, for watering young corn, in May or June; which gives it a start, and much strengthens its growth. In leaky ground, the bottom of the pits should be *staunched* with clay; and stones or gravel stamped in, to harden it.

The privy should discharge into the large pit, if possible, or else into the small one; and coal ashes (but not wood ashes,) are good to throw where this comes out. Saw-dust or turf-dust from the stacks do very well. House-washings, as soap-suds, &c. should also be thrown on the heap; but the wash of the country, and heavy floods of rain should not be allowed to enter it, but be led into the meadows by other channels.

In wet seasons, the top should be slanted to turn off the rain.

Each layer of dung being covered with a layer of peat or other dead vegetable matter, the whole heap, when finished, should be crusted over with way soil, or other earth, to retain the vapors.

The fermentation will be slower or quicker, as it is more or less covered and compressed.

Wherever your heaps are made, whether in the yard or the field, give them a bed of some sort to absorb the drainage, and crust them over with soil, and mix all up with the dung before spreading. The drainage carries down the strength of the heap; sometimes enough to kill the seed in the place where the heap stood; whilst it would have been of the greatest benefit if spread out with the dung.

MOLASSES FROM APPLES BY STEAMING.

The following excellent method for making use of apples, for the twofold purpose of making molasses from them and converting the remainder into excellent food for farm stock, has just been discovered to us by a friend. The apples are placed in a hogshead made tight for the purpose, and subjected to the operation of steam. The saccharine juice soon begins to ooze from them, and drops down to the bottom of the hogshead into the vessel covering the bottom, placed there for the purpose, from which it passes off to proper receivers. The juice is subsequently evaporated by boiling. Sour apples only have been operated upon in this way. The quantity of molasses obtained from them is ten gallons for every fifteen bushels of apples, or a gallon from a bushel and a half. This molasses differs from sweet apple molasses in possessing a peculiar tart flavor. The apples remaining in the hogshead, being softened and well cooked, are mixed with bread or meal and this constitutes an excellent article of food for cattle.

Boston Cultivator.

For the Southern Planter.

CURE FOR POLL EVIL.

As soon as the place comes to a head cut it open and place in the wound a small lump of *arsenic*. This will entirely destroy what is denominated proud flesh. This being removed, rub the sore with some simple healing ointment. This is a certain cure. W.

AN IMPORTANT INVENTION.

We have been much interested in the effects of a small instrument having the appearance of a child's whistle, but performing the important office of inflating and distending the lungs, and giving them a healthy action. It almost performs miracles. A friend who has just returned from Philadelphia and who has used one of these tubes for a fortnight, measures about four inches more around the chest than when he commenced its use; his voice is fuller and stronger, and there is every indication of permanent improvement. This important little agent in removing consumption is formed on very simple principles; the patient breaths entirely through a tube for four or five minutes, inhaling the air through one aperture, and exhaling it through a smaller aperture, thus retaining one quarter of each inspiration, which tends to expand the lungs. This instrument is the invention of Dr. S. S. Rose, of Philadelphia, a man of great talents, who makes that wide-spread disease, consumption, his sole study, and who, if his directions are followed, promises almost to banish from the land this baleful and inveterate foe to human life. He has written a treatise on consumption which all who have weak lungs should procure and read.

Boston Evening Journal.

SODA BREAD.

A correspondent of the *Newry Telegraph* gives the following recipe for making "soda bread," stating that "there is no bread to be had equal to it for invigorating the body, promoting digestion, strengthening the stomach, and improving the state of the bowels." He says, "put a pound and a half of good wheaten meal into a large bowl, mix with it two teaspoonsful of finely powdered salt, then take a large teaspoonful of super-carbonate of soda, dissolve it in half a tea-cupful of cold water, and add it to the meal; rub up all intimately together, then pour into the bowl as much very sour buttermilk as will make the whole into soft dough (it should be as soft as could possibly be handled, and the softer the better,) form it into a cake of about an inch thickness, and put it into a flat Dutch oven or frying-pan, with some metalic cover, such as an oven-lid or griddle, apply a moderate heat underneath for twenty minutes, then lay some clear live coals upon the lid, and keep it so for half an hour longer (the under heat being allowed to fall off gradually for the last fifteen minutes,) taking off the cover occasionally to see that it does not burn. This, he concludes, when somewhat cooled and moderately buttered, is as wholesome as ever entered man's stomach. William Clacker, Esq. of Gosford, has ordered a sample of the bread to be prepared, and a quantity of the meal to be kept for sale at the Markethill Temperance Soup and Coffee Rooms.—*Farmers' Magazine.*

EMBOSSING ON WOOD.

The following method of embossing on wood, invented by Mr. Straker, is extracted from the *Transactions of the Society of Arts*; it may be used either by itself or in aid of carving, and depends on the fact, that, if a depression be made by a blunt instrument on the surface of wood, such depressed part will again rise to its original level by subsequent immersion in water. The wood to be ornamented having first been worked out to its proper shape, is in a state to receive the drawing of the pattern; this being put in, a blunt steel tool, or burnisher, or die, is to be applied successively to all those parts of the pattern intended to be in relief, and at the same time is to be driven very cautiously without breaking the grains of the wood, till the depth of the depression is equal to the subsequent prominence of the figures. The ground is then to be reduced by planing or filing to the level of the depressed part, after which the piece of wood being placed in water, either hot or

cold, the parts previously depressed will rise to their former height, and will thus form an embossed pattern, which may be finished by the usual operation of carving.

From the Albany Cultivator.

TO STOP BLEEDING.

A few years ago, a valuable carriage horse of mine, took suddenly ill on a journey. A professed farrier in the village in which I was compelled to stop, advised bleeding in the mouth, which was done accordingly. But unfortunately, after the animal bled more than a gallon, it was found impossible to stop the blood. We all thought the horse would bleed himself to death. At this crisis, a farmer happened to pass by, and directed an application of the *fresh excrement of the swine.* A small portion of this was immediately held on the wound made by the farrier's instrument, and in *two minutes the blood was completely stopped.* I have tried this simple though not very pleasant remedy, several times since, in similar cases, and with the same remarkable success. J. H. YOUNG.

MOLASSES FOR HORSES AND HOGS.

From the Report of the Essex (Mass.) Temperance Society.

From various persons we have facts fully sustained by their experience, "that THREE gallons of molasses, such as is not used for families, but sold only by the importers for fermentation and distillation, is worth as much as a bushel of corn.

An experienced and good farmer says, "I had rather have one bushel of corn and three gallons of molasses for my hogs, than two bushels of corn without the molasses. I find also a good use for food of those apples that I used to suffer to go to decay, upon the earth. I refer to those, that through the defect by worms, or the action of the wind, fall from the trees. I now pick them all up, put them into a boiler, with potatoes, squashes, &c.; and when boiled and become cold,—the life of the worms being destroyed by the process of boiling,—I then feed my hogs with this mixture, pouring over it a few quarts of molasses, very much in the same manner as we use the good molasses in our families, with bread, rice, hasty pudding, &c.—thus making a nutritious food, and dispensing entirely with the use of antimony, or any other regulating medicine for the animals."

Another, who has had much experience as to the useful and noble animal—the horse—writes: "I now use molasses quite freely as food for my horses. If the hay is a little defective, I pour molasses upon it, and it is relished by the animal. If I use oats, barley, or corn, I find the same process useful. It not only gives a relish to the fodder,—but is a good regulator of the bowels; and since I have used molasses with their fodder, I have not lost a single horse by the 'worm of the maw,' generally known as the 'botts.' And the same is true in relation to other animals, oxen, cows, &c. They appear to thrive much better, by the use of molasses with their food."

It is also among the reminiscences of a well known trader in horses in this country, that when he wishes to prepare for a speedy sale, those horses that he had purchased in a poor state, his method was to feed them somewhat plentifully with molasses; and in connection with other food, they were found to thrive with much greater rapidity than they otherwise were wont to do.

CONTENTS OF NO. V.

Grazing—An extension of the grazing system recommended to the farmers of Eastern Virginia, p. 97.
Timber—Should be cut in winter, p. 98.
Lime—Its effects upon sorrel, p. 98.
Corn—Mr. Woodson's mode of cultivating, p. 99.
Liberality—An instance of, p. 100.
Report—Of the Hole and Corner Club of Mecklenburg, p. 100.
Timber—A machine for felling, with a cut, p. 101.
Tobacco—The character and qualities of different kinds, p. 102.
Ploughing—Remarks on, p. 103.
Cabbages—To free from lice and worms, p. 104.
Tobacco—To prevent its firing, p. 104.
Paint—Recipe for a cheap paint, p. 104.
Whitewash—Recipe for a brilliant whitewash, p. 104.
Manure—Proper management of farm-yard and stable manure, p. 105.
Grasses—Comparative value of timothy, herdsgrass, orchard grass and clover, p. 107.
Distemper—Induced by change of pasture lots, p. 107.
Tobacco Prize—Description of one, with a cut, p. 108.
Comments—On the January and February numbers of the Planter, p. 109.
Buckwheat—Directions for the cultivation of, p. 110.
Tobacco—An exhauster, p. 111.
Wrinkles—Preventive of, p. 111.
Vegetable and Animal Supporters—Essay on, p. 111.
Report—Of the Commissioner of Patents, p. 112.
Silk—American capabilities, p. 112.
Grubs—Value of remedy confirmed, p. 113.
Bommer's Manure—Description of, p. 113.
The Season—In Indiana, p. 115.
Threshing Machine—Exall's described, with a cut, p. 116.
Agricultural Clubs—Their value, p. 117.
Composition—For preserving wood, p. 117.
Old Field Pines—Inquiry, p. 117.
American Agriculturist—Notice of, p. 118.
Dung-Heap—Directions for managing, p. 118.
Molasses—To be obtained from apples, p. 119.
Poll Evil—Remedy for, p. 119.
Lungs—Invention for exercising, p. 119.
Soda Bread—Directions for making, p. 119.
Engraving on Wood—Easy method, p. 119.
Bleeding—To stop, p. 120.
Molasses—Value of, as food for horses and hogs, p. 120.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. III. RICHMOND, JUNE, 1843. No. 6.

RULES FOR BREEDING.

Although there is a great discrepancy of opinion upon some portions of the mysterious art of breeding, the following precepts, from the pen of one of the most distinguished anatomists in Europe, Professor CLINE, are, we believe, universally received as established doctrines amongst those who have the best right to know; although dame nature sometimes amuses herself in setting at naught the most ingenious theories of philosophers.

When the professor objects to large bones he must not be misunderstood. From the bone and muscle strength is derived, and, we presume, the greater the *quantity* of either, the greater will be the strength of the animal: but the quantity is not always to be measured by *size;* indeed, as Mr. Cline remarks, they are generally found in an inverse ratio. In some animals a much greater quantity, both of muscle and bone, is condensed into a much smaller space than in others, and this constitutes the great physical difference between the Arabian and their descendants, commonly styled "blooded horses," and those of other descriptions. The ivory of the blooded-horse will always *outweigh*, though it will never *outmeasure*, the open, porous bone of the cart-horse. But where the density of fibre is equal, size will indicate quantity, and therefore, strength. With equal quality of bone and muscle then, the largest animal will always be the most powerful. With this commentary, we give to our readers the Professor's opinions upon the following subjects:

"*Muscles.*—The muscles and tendons, which are their appendages, should be large; by which an animal is enabled to travel with greater facility.

"*The Bones.*—The strength of an animal does not depend on the size of the bones, but on that of the muscles. Many animals with large bones are weak, their muscles being small.—Animals that were imperfectly nourished during growth, have their bones disproportionably large. If such deficiency of nourishment originated from a constitutional defect, which is the most frequent cause, they remain weak during life. Large bones, therefore, generally indicate an imperfection in the organs of nutrition.

"*On the Improvement of the Form.*—When the male is much larger than the female, the offspring is generally of an imperfect form. If the female be proportionably larger, the offspring is of an improved form. For instance, if a well-formed large ram be put to ewes proportionably smaller, the lambs will not be so well shaped as their parents; but if a small ram be put to larger ewes, the lambs will be of an improved form.

"The proper method of improving the form of animals consists in selecting a well-formed female, proportionably larger than the male.—The improvement depends on this principle: that the power of the female to supply her offspring with nourishment is in proportion to her size, and to the power of nourishing herself from the excellence of her own constitution.

"The size of the fœtus is generally in proportion to that of the male parent, and therefore when the female parent is disproportionably small, the quantity of nourishment is deficient, and her offspring has all the disproportions of a starveling. But when the female, from her size and good constitution, is more than adequate to the nourishment of a fœtus of a smaller male than herself, the growth must be proportionably greater. The large female has also a greater quantity of milk, and her offspring is more than abundantly supplied with nourishment after birth.

"To produce the most perfect-formed animal, abundant nourishment is necessary from the earliest period of its existence until its growth is complete.

"The power to prepare the greatest quantity of nourishment from a given quantity of food, depends principally upon the magnitude of the lungs, to which the organs of digestion are subservient.

"To obtain animals with large lungs, crossing is the most expeditious method, because well-formed females may be selected from a variety of large size to be put to a well-formed male of a variety that is rather smaller.

"*Examples of the Good Effects of Crossing the Breeds.*—The great improvement of the breed of horses in England arose from crossing with those diminutive stallions, Barbs and Arabians; and the introduction of Flanders mares into this

country was the source of improvement in the breed of cart-horses.

"*Examples of the Bad Effects of Crossing the Breed.*—When it became the fashion in London to drive large bay horses, the farmers in Yorkshire put their mares to much larger stallions than usual, and thus did infinite mischief to their breed, by producing a race of small-chested, long-legged, large-boned, worthless animals."

QUACKERY.

We hail with pleasure and gratitude any intelligent and scientific communication upon the subject of diseases in the horse. This noble animal has too long been surrendered to the tender mercies of the ignorant and designing. In the human frame, science and learning are prepared to contest, if not to conquer, the pretensions of quackery, even in the present day of humbug. But dominion over the lower animals is surrendered to the pretensions of ignorance almost without a struggle. It is even ludicrous to observe the process to which a sick horse is frequently subjected. The owner generally commences by poking and thrusting a variety of compounds down his throat, one after another, at random, because he is sure he has heard either that, or something like it, recommended for something, and then, if he fails to strangle or kill him, he sends for the "horse doctor;" who, with equal ignorance and a great deal more pretension, subjects the poor brute to a similar course of treatment. The sagacity of the animal is sometimes greater than that of his master, and we knew an old horse once, who had been so long subjected to this kind of treatment that he would, instinctively, recognize and shy from a *horse doctor* whenever he met him.

Defects of the eye are very common, and we recommend the following extract, particularly, to the notice of our readers:

"*Cure for Inflamed Eyes of the Horse.*—Notwithstanding my occupation requires my attention and exertions in attempting to cure or palliate the "ills that flesh is heir to" in the human species, my sympathies have been occasionally enlisted in behalf of that noble animal upon which we are so much dependant for many of our pleasures and comforts, and derive so much important service—the horse, in consequence of the empyric and barbarous treatment frequently practised upon him.

"If the animal who claims for himself the image of his Maker, is willing to indulge in Brandreth's Pills, Lobelia, Magnetic Ether, and Jew David's Plaster, and write for his epitaph, 'I was well, took physic and died,' let his curiosity be gratified; but while we assume to ourselves the guardianship of the fourfooted part of creation, let us discharge the duty in that manner that shall at least entitle us to the virtue of humanity.

"Not unfrequently when I have been giving my horses high feed and severe service in hot weather, over hard and dusty roads, I have observed them frightened and shy from objects to which they usually paid little or no attention; and upon examination of the eyes, have discovered the external membrane (*tunica conjunctiva*) thickened so much as to impair or obstruct the vision, presenting a whitish appearance occasionally in spots, but frequently involving the entire membrane covering the organ. At this discovery many kind friends, actuated by the best of motives, would volunteer their aid and advice, for the purpose of removing the difficulty. Mr. A., exhibiting an air of great confidence in his skill in such matters, would say, 'You must pound glass until it is very fine, and blow it into the eye through a quill, to *cut the scum*.' A remedy, or rather an intended remedy, that would most assuredly render him blind, even though the disease should fail to accomplish that result. Then comes Mr. B.: 'Sir, you must blow burnt alum in that eye.' Mr. C., quite as knowing as his neighbors in these affairs, makes the following prescription: 'Blow powdered blue stone into it, and rub a little rabbit's grease above the eye, and my word for it, to-morrow morning it will be as bright as a diamond.'

"By just such treatment many a noble roadster has been prematurely consigned to the cart or tread-mill; whereas, had the matter been entrusted solely to the operations of Dame Nature, the result would have been widely different.

"The course that I invariably pursue in such instances, is to keep the animal in a dark stable, to be fed upon hay, or if practicable, fresh cut grass and coarse bran—bleed freely from the mouth, and administer one and a half pounds of Glauber salts, two drachms of nitre, and fifteen grains of tartarized antimony in a bucket of water, and repeat the same daily until free purgative operation is produced. The animal will be invariably found in a feverish condition, and if kept from water for a short time will drink the mixture freely. If these means do not soon produce a salutary impression, I bleed from the large vein immediately below the eye. By placing the thumb of the left hand firmly upon the part, the vessel soon becomes distended, and the operation may be most conveniently performed with a common spring-lancet. By this means I have frequently succeeded in extracting from twelve to twenty ounces of blood, which has acted like a charm, by relieving the en-

gorged vessels of the inflamed membrane. The whitish or sometimes yellowish appearance, depends upon the effusion of coagulated lymph deposited during the acute stage of the disease. When the absorption of this does not progress freely, and the eye fails to assume its accustomed lustre and transparency, I blister a semicircle below the eye, one and a half inches in diameter, by applying daily with the point of the finger, a mixture of three parts of the common blistering preparation as obtained from the druggists, and one part Venice turpentine. Sometimes the other membranes of the organ become diseased from similar causes, to remedy which, the foregoing treatment as detailed will be applicable. Care should be observed in not too suddenly exposing the patient to a strong light, high food, or active service.

"Thus I have given you, as our Buckeyes term the science, a chapter on 'horse-doctoring,' and if you perceive any thing in it that will repay you for the trouble, you are at liberty to publish it, with the promise, if it meets your approbation, of resuming the subject in some future number.

ANDREW CAMPBELL, M. D.

Middletown, Ohio, February, 1843."

American Agriculturist.

For the Southern Planter.

Wood Lawn Farm, Orange, May 4, 1843.

Messrs. Editors,—There is not a more palpable truism in all the pages of the Southern Planter, than the following sentiment given in your April number from a western paper: "After the imagination is completely exhausted in eulogizing the various products of mother earth, there is nothing to be compared to the old-fashioned blue grass for permanent pasture." Now, gentleman, as you have hoisted this flag, permit a recent and humble patron to urge upon you to nail it for a season to your editorial mast-head, for if we can get this invaluable grass to take permanent hold upon our soil, it will be worth more to the agricultural interest of our division of the Commonwealth, than all the theories of agricultural chemistry, from professor "Liebig," and the essays from Loudoun's encyclopœdia put together. If we can get such a friend to stick with us, either upon the virgin soil of our protected forest when freed from its unprofitable undergrowth, or upon our river bottoms, the tide of emigration would soon cease to set its face to the setting sun. It is worth the trial—then to give you an earnest of the willingness with which I will commence a little experiment upon a tributary of the York, I will become (if you can procure it) a purchaser of a half bushel *clean seed* if they are "sound and fresh, provided it can be gotten under $10 a bushel, by the first of next January. I am emboldened to make this experiment from the luxuriant turf of it I find about my garden walks, as well as other uncultivated spots about my farm.

I agree with you, that the great defect in our farming system "consists in *too much tillage*, and *too little pasturage*." Then, gentlemen, fly the blue grass flag, and get others to try its culture too.

Respectfully your obedient servant,

P. SCALES.

We think we have done the State some service if we have been the means of inducing even one gentleman to make a fair experiment with this valuable grass. We will do our best to obtain the seed for Mr. Scales, and hope to procure it for much less than ten dollars a bushel.

ENGLISH AGRICULTURE.

Whatever opinion we may form of Britain, her pride, arrogance, insolence, presumption, vanity—faults, too, that will have to be amended within ten years by the compulsory process of a general alliance of nations against her—yet we must all confess that her agriculture is the most stupendous thing under heaven! When it is remembered that the crop of turnips grown in Norfolk alone is greater than the value of her trade with China; that the market price of geese brought from the Lincolnshire fens is more than her trade with Denmark; that you shall see, as a common thing, a hundred acres of turnips, or a hundred acres of beans, or thirty acres of cabbage in a single field—a farm of three hundred acres all mown, or a farm of the same size, (three hundred acres) all in crops—the live stock on a single farm worth $50,000—twenty horses employed on one farm every working day in the year, and by means of thrice ploughing, (heavy clays,) turning nine hundred acres in a single year—I say, when this is remembered, it will be seen that "great" as Britain is in every thing, the superlative degree of greatness is in her agriculture—in her soil, naturally poor, but made rich by the application of capital and unwearied assiduity, good sense and enterprise. While in this country we fail most from the want of capital, and from the circumstance that agriculture does not rank as an employment with others (especially with trade it is not valued) as it ought to be. The English contend that it was never so valued in a democratic country; agriculture being, in their estimation, substantially an aristocratic employment; and it must be confessed that this is true of England. To be wanting in the dignity conferred by landed possessions, is to want that which conducts to the highest offices and the most exclusive society. The term country gen-

tleman, is in England almost an actual patent of precedence; and so far do they carry this, that no man in trade can marry into a family of landed descent and possessions, unless he add to wealth an eminent character for talent.

Farmers' Monthly Visitor.

There is nothing in a democratic government that deters from the pursuit of agriculture.—There is no portion of the earth more zealously devoted to our democratic institutions than the people of Virginia, yet are they strictly an agricultural population. In truth, wherever nature has granted a favorable climate and soil, such are the innumerable advantages of this delightful occupation, that it must enlist amongst its votaries the great mass of mankind. Those, whose means induce them to look rather for enjoyment than accumulation, will always seek the noble pleasures of a country life; and he who wishes to engage in agriculture where it is sanctioned by the example of the aristocracy of wealth and learning, need not go to England to seek it. He will find it throughout the whole southern country. The farmers compose the aristocracy of Virginia, certainly; they know and feel it; you can see it in the slow and solemn gravity with which they pace our streets, when business brings them to the city; they look down upon the hurrying cit, as they meet him on the side walk, with ineffable contempt; they know that he is the patient drudge who labors in their service; whilst they, the lords of the land, revel in the luxury and ease that their more favorable occupation secures them. We know nothing here of that which is so often complained of to the North, the unjust degradation in which agriculture is held. The name of *Planter*, at the South, is almost equal to a patent of nobility, and the occupation, in point of dignity and importance, has nothing to fear, with us, from the sneers of the most haughty.

POULTRY BETTER THAN PORK OR BEEF.

In this age of improvement in the production of animal and vegetable food, if there is any good reason why all the science, skill and enterprise of agriculturists, editors, chemists and philosophers, should be applied to the melioration and refinement of one or two classes of animals, to the exclusion of others as good by nature as they are, we should like to know it. The hog and the bullock, dubbed with the English titles of Berkshire, and Durham, seem to walk over the land with a sort of John Bull swagger, that has commanded all attention, and left all their brute brethren in their uncultured native deformity; while those foreign *titled* gentry have, in the eyes of some, become absolute perfectionists. Now, in the language of our declaration of rights, "we hold these truths to be self-evident, that (by their constitution) they are all created equal."

We are aware that the noble Berkshires, by their elaine and stearine, have kindled up a great light in the West, (which we hope may dispel the black cloud of repudiation that hovers over that region,) and are about to monopolize all the care and labor of the farmers thereabouts; but we can see no reason why the delicate, feathered race should thereby be debarred from sharing in the benefits and perfectionisms of cross breeding, in-and-in breeding, and all other scientific advancements in the world. The noble and ancient family of Chanticleer, whose clarion note has been the world's time-piece, ever since Peter denied his Master, and has never failed to sound the approach of every rising sun; the bird that saved Old Rome from conflagration by her warning voice in the dead of night,—shall these lose their old established rank, and give place in man's affections to "*herds of swine*," and the sturdy Bulls of Bashan? What are all *their* uncouth grunts and frightful bellowings about the farmer's cottage, compared with the music of the cheerful chirping, chatting, cackling, crowing, gobbling, quacking, squeaking, squalling, with which his poultry-yard resounds from day to day?

But, to come to more sober matter of fact, we think this branch of the farmer's concern is deserving of more attention than it has generally received. The profit derived from a well arranged, well managed poultry yard, is greater, in proportion to the investment, than that of any other stock, bees excepted. More attention has been devoted to poultry in the vicinity of Philadelphia, than any other part of our country. The Bucks county poultry have acquired a good degree of celebrity, even in the New York market, where they are sometimes found in abundance. They are, however, but moderate layers; but their eggs are large and well flavored. Yet they are not considered equal to our dung-hill fowl in all respects.

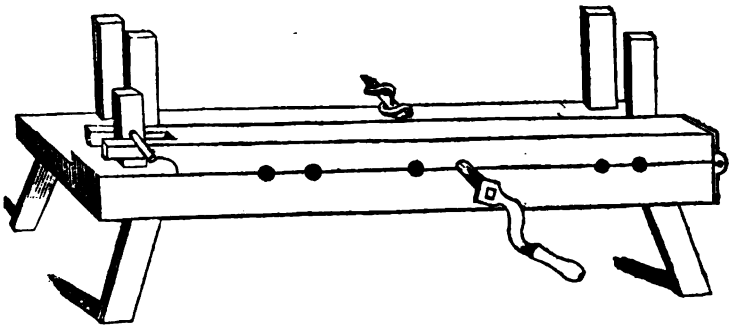
The *Dorking* fowl stands first in the estimation of those who have raised them. They will weigh from five to eight pounds. Their bodies are large, and better proportioned than any others, being long, full, and well-fleshed in the breast. They have short legs, and beautiful plumage, with five, instead of four toes; are good layers, good sitters, and good nurses.—Their eggs are large, clear white, and of excellent quality. When caponed, in the English mode, they weigh from ten to twelve pounds. Mr. L. F. Allen, of Buffalo, to whom we are

indebted for the Dorking history, has them for sale.

Our object in writing this article at this time, is chiefly to suggest to our agricultural societies the propriety of offering liberal premiums for the best specimens of the various kinds of poultry, at their next annual fairs. We need say nothing in favor of the richness and delicacy of this luxury of the table. Good premiums will soon bring out new species and valuable improvements in this, as in any other branch of agriculture.

A writer in the Maine Cultivator says his experience tells him, that the best mode of fattening poultry is, to shut them up where they can get no gravel—keep corn by them constantly—give them dough once a day, and skim-milk for drink. Thus they may be fatted in ten days. If kept up longer, should have some gravel, or they will fall away.—*Farmers' Gaz.*

POST-AND-RAIL FENCE.



We have been the steady advocates of post-and-rail fencing, which we believe to be, under ordinary circumstances, by far the most convenient and economical mode of constructing a farm enclosure. Its only rival in this part of the world, is the unsightly worm-fence, which requires double the quantity of timber, now getting scarce amongst us, and involves a much greater amount of labor. The greatest objection heretofore has been the labor of mortising the posts. A year or two ago, we pointed out a mode of procedure which very much facilitates this operation, and which we have reason to flatter ourselves has not been without its effect upon the public. We recommended the boring two holes close together with a two inch auger, and the use of a long narrow-bladed axe for cutting out the wood between them, thus affording a mortise of four or five inches long, two inches wide, and round at the ends, in a few minutes. We were, therefore, much pleased to find in the basement story of the Patent Office, a few weeks since, a fixture, of which we made a sketch, (as engraved above) which we think will be found a great convenience in boring the holes. The post to be bored is placed between the uprights on the frame, and an ordinary auger, having a crank affixed, is made to turn in certain holes cut to fit the shank. By removing a pin and raising the cap, which turns on a hinge, the auger may be shifted from hole to hole, as required. A stop or guage should be affixed to the frame against which the head of the post should be placed, so as to make the mortises in the different posts correspond with one another; but then care must be taken in setting, always to leave the same length of post out of the ground.

The advantages of this machine are that it saves the trouble of laying off the posts, and guards against error in the same. It also bores the hole straight, which will not always be effected by a common laborer. It requires little or no more labor to construct it, than is required for the common clamp to hold the post.

We see that Mr. Ellsworth has recommended this machine in his report. He advises the use of a two and a half inch auger. Having had several applications for them we have given an order for some of the mortising axes alluded to.

CURIOUS METHOD OF PLANTING CORN.

Mr. John W. Sweet, of Tyringham, Berkshire county, informs us that he plants his corn in the following manner, and has realized 110 bushels shelled corn to the acre.

He spreads what manure he intends for the field on the surface of the greensward; then he ploughs the land into ridges about three feet apart in the fall—each ridge or row being made of two back furrows turned upon a narrow strip of sward which is not disturbed. In the spring he rolls and harrows these ridges, and on the top of each ridge, twelve or fourteen inches apart, he plants his hills of corn, three or four kernels in the hill, and cultivates the corn through the season with the hoe, cultivator and plough, as much as he deems necessary. In this method, he remarked that he was not troubled with weeds or the drought.

In the fall, as soon as his corn is ripe, he gathers the ears, then pulls up all the corn-stalks and lays them down lengthways between the furrows, and then splits the ridges with his plough, and covers these stalks up completely. Thus is made his ridge for his second crop of corn, to be planted the succeeding spring. The 110 bushels was the second crop planted over the buried stalks.

The above is sufficient to give the reader an idea of this system. He contends after the first crop he wants no more manure for his corn except the stalks applied as we have described.

It is quite probable, the three sods and manure being under the corn the first year, that while these are undergoing decomposition, being the whole period of the growth of the corn, the crop will suffer less from drought than it would were there no vegetable matter beneath it to attract and detain moisture till its decomposition is completed.

As to the fact that corn-stalks are the best manure for corn, the idea is strictly philosophical, and is fully sustained by chemical analysis. The doctrine seems to be well settled, that each crop requires its own peculiar food, and unless the soil contains this, the crop will not flourish. Hence the necessity of rotation of crops, or the well established fact, with practical men, that potatoes will not thrive for many years in succession on the same piece, because the crop has already exhausted the soil of the peculiar food of the potato, while some other crop requiring a different kind of food from what the potato requires, will succeed well on the same land where the potato crop has failed. Thus as the ox and the sheep, when put to the same stack of hay, the one will eat what the other leaves; so it is with plants.

Now, if you shoot a partridge, and cut open its crop, and find in it acorns and buds, you at once infer that acorns and buds are the natural food of the bird. So when by chemical analysis you ascertain the precise elements of which corn stalks are made, you have ascertained precisely what kind of food the corn crop requires. Now as corn-stalks contain the very elements of the food required by the corn crop, and return to the soil all the substances of which they exhaust the soil, the chemistry of agriculture teaches us that corn-stalks, while undergoing decomposition, furnish the growing crop with those very gases required for the elaboration of the solid stock and ears.

But this is not only the conclusion of science, but a universal law of the vegetable world, by which an all-wise and bountiful God has provided that each precise species of plants shall be re-produced and perpetuated. Thus the forest land, for centuries subject to a mighty growth, from year to year, not only increases in fertility, by an annual top-dressing, fitted to the very purpose for which it is wanted, and composted by the unerring hand of Deity, but also, from year to year, has something to spare for the good of man and beast.

Thus in the vegetable as in the animal world, there is a wise provision, that each shall be sustained and re-produced; and as these natural laws are more and more developed by science, we may expect the purposes of Infinite Wisdom, as to the vegetable world, will be less and less frustrated by the hand of unskilful culture.

Boston Traveller.

For the Southern Planter.

COMMENTS ON THE MARCH NUMBER OF THE SOUTHERN PLANTER.

Indian Corn and Old Field Pines.—J. H. Fuqua, of Amherst, writes with a strong farmer's hand, and it is hoped he will let us hear from him again.

Tobacco.—Mr. Venable's communication in this number on tobacco is very good, but I have a few objections. In the first place, I object to the underlaying of a plant-bed with tobacco stalks. If the stalks were beaten fine and cast over the bed after sowing, the effect would be far superior. Or if, instead of the stalks, lug tobacco were made into snuff, and thus applied, still the better. I should never think of sowing tobacco seed in the month of December, particularly on a warm bed, immediately after burning; for there is certainly danger of their vegetating and being destroyed by frosts. In situations where a plant-bed is liable to be cloyed by drift leaves, the covering should not be put on till the latter part of March or first of April, when the bed can be trodden the second time, if required. The best manure for a plant-bed, is poudrette, or the dung of fowls. The latter part of this communication I particularly commend to the perusal of planters.

Poudrette.—Mr. Woodfin's determination to improve his lands is highly commendatory; and if he does not succeed it cannot be his fault. If I lived in or near Richmond I should undoubtedly seek the privilege of saturating plaster with urine, at the capitol. Also that of composting dead animals with marl near Rocketts.

Broom Corn Hay.—There can be no doubt as to the good quality of broom corn hay; as to the mixture of peas, the idea is new to me. I should not object to rich land for any hay crop; for all that is necessary is to sow thicker.

The Manner of Applying Manure.—So far from objecting to spreading out manure, made the previous summer and fall, as early as the month of February, I object to keeping it on hand thus long. My practice is to spread the manures above referred to, on the meadow or elsewhere in the fall of the year. That made early in summer, can be profitably used amongst the crops in the garden or field.

COMMENTS ON THE APRIL NUMBER.

Jerusalem Artichoke.—I agree with T. F. in all he says, except the distance of planting, which is too great; and the planting of corn and artichokes together, which I think should never be done. I do wish that some person would undertake an experiment for the purpose of ascertaining whether artichokes, like potatoes, cannot be improved by growing from the seeds.

Charcoal.—To those who have surplus wood, Za. Drummond's communication on coal is highly interesting; and it is hoped he will give the result of his experiments.

Blue Grass.—The editorial and extract from T. F. is good and true in all its parts. I would, however, remark that the Kentucky blue grass is the Virginia green grass. The blue grass of Virginia is a different and inferior article.

Double-Eared Corn.—Never too late to do good; so Mr. Hart now answers a question thirteen months old. He does not, however, answer to my satisfaction, for we all know that a single stalk to a hill is apt to bear two or more ears, and thus it may be that the two ears outweighed the one. There is no way of testing the question which is the most productive corn, except by the acre, or other given quantity of land.

Suckering Corn.—If Mr. Hatton will plant or leave his corn thick, he will not be troubled with suckers; for if the plants be sufficiently numerous to digest all the food within their range, all is right. As Mr. Hatton's land is rich, he should never manure in the hill, but rather between the rows, that the stalks may be perfect, and the ears weighty. Or what does Mr. Hatton, or other persons with poorer land, say to manuring with plaster or poudrette, one or both together, at the last ploughing of the corn?

Edward Hill's Experiment.—I wish Mr. Hill had told us how long his corn rows were, so that an estimate could be made.

To Improve a Piny Old Field.—I think "Old Flu." intended to say, that the pines should not be cut down and turned into coal until the second spring after being belted. With this correction, I hope to try his plan.

The Preparation of the Land and the Cultivation of the Tobacco Crop.—I wish I could recommend this number of Mr. Venable as highly as his first, but as a system, I must object to much of it. When clearing is to be done, I care not how many armed knights make the attack, nor how quick they conquer. I cannot assent to the assertion, that twice as much tobacco can be made on manured land, and that invariably more can be had for it; for many of the new grounds in my neighborhood produce as much as the manured lots, and we invariably get a higher price for the tobacco. Mr. Venable seems to think that a tobacco grower, on new land, cannot find time to spread manure; now I do not pretend to any great things, but I make nearly two hogsheads of tobacco to each hand, yet, by manuring, keep my whole farm in a state of improvement.

It does seem to me that Mr. Venable's remedy for preventing fire, or rot, is worse than the disease; for undoubtedly the tobacco must be small which grows on a light fallow with a hard pan between the hills, a scraping culture, and that not continued longer than the time the tobacco is liable to fire. My rule is to force my tobacco, by deep and late culture, to grow as large as possible, and risk consequences. I have no objection to the application of litter to tobacco land, for it is not only a direct food, but it absorbs water; and here it seems to me that Mr. V. is reasoning against his own argument. Mr. Minor and Mr. Venable are both right about the cut worms, for there are not only two, but three kinds. If Mr. V. would pulverize his ground by the second ploughing in the winter, he would not only kill the *cut* worms, but all others.

Short Hints.—Argus seems to be a new hand at the bellows; I hope he will try again.

Premium for the Best Specimen of Ploughing, to be performed by the farmer himself.—Oh! I wish I lived near your city; I would show you how to wield the plough handles. It does seem to me that this ploughing match should, and will, draw together a great many farmers, "and may I be there to see."

I trust that Mr. Venable and all others will take my remarks in the kindest spirit; as my sole object is the general good.

INVESTIGATOR.

May, 1843.

PREMIUMS.

In a letter from Mr. Bement to the Editor of the "American Agriculturist," he complains much of the want of judgment in the individuals frequently selected to award premiums at our agricultural exhibitions. The fact that the best judges are frequently competitors, presents a great obstacle to a good selection; but it is certain that complaints are frequently made, and not without reason, of the decision of premium committees. It is not uncommon to see a machine receiving a premium that the public entirely discards, and the manufacturer himself, after a little while, totally abandons. We know several in that predicament. We have seen mechanics not a little amused at the inquiries and observations of an examining committee, and truly they have been sometimes of rather a funny character. The fact is, we settle these things, as we do some others in this country, too much by *guess* work. Irreparable injury may in this way be done to the public as well as to the deserving breeder, or manufacturer; and thus, unless great care is taken in the selection of judges, these exhibitions may become public nuisances, instead of public benefits.

We recollect noticing and commending, at the time it was made, the suggestion of Mr. Allen, referred to by Mr. Bement. He proposes that the chairman of the committee, in making his award, shall state clearly and distinctly the principles by which the committee were governed, referring directly to the competing articles, and pointing out the supposed advantages of the successful one. What an interesting and practical commentary this world afford upon each particular subject. The objection made to it, is, that there are many men who are good judges of an article, that can't make a speech. We admit it, and we like them all the better, we believe, for not being able to make a "speech;" but a man must be very unfit to be a judge or any thing else, who, when he has six heifers before him, can't tell the public why he prefers one to another. In alluding to this subject on a former occasion, with too much respect for the bashfulness (not modesty) of some gentlemen, we hinted that the same object might be effected in a written report, but, on reflection, we are satisfied that nothing would be so satisfactory, and so calculated to increase the interest in, and instruction to be derived from, these exhibitions, as the plan proposed by the Editor of the "Agriculturist." Who, for instance, would not go a hundred miles to hear "Billy Johnson" compare the "points" of six of the most distinguished horses in the Union, with the subjects before him? It would form a *discourse* more interesting and instructive than all the essays that were ever written upon the subject.

Mr. Bement insists that some fixed principles, as far as practicable, should be adopted by the Society, as a standard for the decision of the committee, and as a source of information for the producers. For instance, he proposes that the following should be agreed on as the points of horned cattle for comparison, and that the animal combining, or possessing, the greatest number of these points, shall be deemed most meritorious:

"1. Head small with a bright and prominent eye.

"2. Horns small and tapering.

"3. Neck small at the junction with the head, and gradually thickening to the shoulders.

"4. Brisket broad, deep, and projecting well forward.

"5. Shoulders full and no hollow behind them.

"6. Body deep, round, and capacious; back straight.

"7. Loins broad, and wide between the hips.

"8. Legs short, full, and muscular above the knee—small below.

"9. Flanks well let down.

"10. Tail set on even with the line of the back, small and tapering to the end.

"11. Broad in the twist, and if a cow, large milk veins and capacious udder.

"12. Though last, not least, soft silky hair, thin skin and good handling of the flesh.

"Other points might be given, but the above will exemplify my ideas on the subject."

AGRICULTURAL CLUBS.

A Farmer's Club has been formed by our friends near Wilmington, Delaware, on a somewhat novel plan. It consists of twelve members only, who meet on the first Tuesday of each month, at the house of one of the members in rotation, at 10 o'clock, A. M., when "an examination," says the Delaware Gazette, "is made by the club of all that pertains to the farm, stock and cultivation of their host—his fields, his fences, farming utensils, mode of applying manure, rotation of crops, &c. &c. The conveniences and accommodations of his farm-house, barn, piggery and poultry-yard, are all matters of observation and discussion. At an early hour a plain farmer's dinner tests the thrift and cookery of his *better half*—her bread and

butter, her savory meats and pies, well fatted poultry, her cheese, milk and cream, rich, fresh and cool from the just admired dairy, all afford practical themes at the dinner for discussion of their merits, and of woman's worth; as far as practicable, the products of the farm are required to be used for this part of the entertainment. Politics and political matters are at no time alluded to or admitted. After dinner, agricultural subjects are discussed and experiments reported; agricultural works and journals exchanged, noxious weeds noticed, and all the agricultural improvements and publications since the last meeting are passed upon and reviewed—seeds, plants, new grains, &c., distributed—the entertaining member for the next month is agreed upon, and the club adjourns, *always early*, to attend to the *feeding and foddering at home*, before dark. The gentlemen who compose this club, consist of Messrs. Bryan Jackson, C. P. Holcombe, John W. Andrews, Jesse Gregg, Sam'l Canby, Henry Dupont, J. Boies, J. W. Thomson, Francis Sawden, William Boulden, George Lodge and Major Joseph Carr."—*Cultivator.*

This is exactly the plan of the "Hole and Corner" clubs in Virginia, from which no doubt it has been taken. We most sincerely wish we could see them extended into every hole and corner of the Union.

For the Southern Planter.

Bluestone, May 4, 1843.

Messrs. Editors,—The enclosed was written at the request of the Upper Corner Club of Mecklenburg, and read at its last meeting, when the following resolution was adopted:

"*Resolved*, That the paper just read by the President, Mr. A. C. Morton, be placed upon the records of the Club, and forwarded to the Editors of the 'Southern Planter,' with a request that they publish it in that journal."

ON THE COMPARATIVE ADVANTAGES OF HERDSGRASS AND CLOVER, AS GENERAL IMPROVERS OF THE SOIL.

Gentlemen,—I should not have ventured to deviate from the rules of the Club, in submitting my views *in writing* on the subject of the comparative merits of Herdsgrass and Clover, as general improvers of the soil, but for the invitation to do so, which was given to me at the last meeting. With this apology, I shall proceed at once to the subject in hand.

That no extended system of improvement can be rapidly and successfully carried on, without the aid of the artificial grasses, as a general rule, will, I presume, be conceded by all present.

Manure, which is essential to the improvement of all soils, should be abundant on every farm, and every agent, which aids in increasing the quantity or quality, without detracting from the fertility of the soil, whence it is taken, is desirable, in proportion as it effects this object.—No agents of this kind, so susceptible of extended application, have yet been employed, as the artificial grasses. As food for stock, they constitute the cheapest, as well as the most nutritious; as covering for the soil, to shield it from the impoverishing effects of the frost and winds of winter, and the parching sun of summer, they constitute the most complete; as litter or soiling for stock, they are the cheapest, richest, and most abundant; and as agents to prevent the gradual washing away of the soil by heavy rains, none have been found so effectual. So, that, whether we use them as food for stock, top-dressing for lands laid out to rest, or litter for our stables, farm-pens, &c. their value must be admitted. That they, or some of them, are in general, essential to extensive improvement, will also, be readily admitted; but the question of the comparative advantages of herdsgrass and clover, is one that admits of more doubt. When land, and especially tobacco land, is to be cultivated on the three shift system, clover is certainly preferable to herdsgrass, for the reason, that it forms a more speedy, and a more complete covering for the land, when laid to rest; the clover requiring one year only to arrive at maturity, while the herdsgrass requires several, to produce such a turf as is adequate to any great improvement. But when the four or five shift system is pursued, I have no hesitation in giving the herdsgrass the preference; and so far as the tobacco crop is concerned I have never known it to fail on herdsgrass turf, well cultivated, while clover lots frequently fail entirely, from want of its necessary concomitant, *plaster*, or from the ravages of vermin, or some other unknown cause. As a fallow for wheat, I consider the herdsgrass totally unsuitable, on account of the difficulty of eradicating it, particularly on moist land—while the clover is easily destroyed by summer fallow. As a forerunner of corn, I consider the herdsgrass objectionable, on account of the difficulty of preventing its growth among the young corn, and the additional labor which it requires to reduce the strong turf which it forms; all which may be partially overcome by early working. But it is chiefly as a hay crop, and as a grazing grass, that I give this the preference to all other meliorating crops relied on in this country. Among the many errors maintained and exploded in the agricultural community, there is not a greater, than that a small stock in proportion to the size of the farm, or in other words, that the "*non-grazing* system" is essential to improvement. Under the mode pursued by many in this country, of keeping a large stock, without the aid of the

artificial grasses, this might seem plausible enough, but many enterprizing farmers and planters have discovered, that just in proportion to the quantity of the artificial grasses cultivated, is the means of grazing and keeping stock, and just in proportion to these, is the improvement in the stock, the facility of making manure, and the consequent improvement of the land. My own observation has satisfied me, that the dung dropped by cattle running on land cultivated on the three and four shift systems, without the aid of the grasses, bears no proportion either in quality or quantity, to that from land laid down in herdsgrass or clover. As hay, herdsgrass has no superior, whether you regard the quantity or the nutritive qualities of the food, for every variety of farm stock, or the litter which it affords for the stables and farm-pens. Here the herdsgrass has the most decided advantage over clover, not only in the quantity and quality of the hay, but in facility of curing and preserving it from the effects of moist or rainy weather, or from heat and mould in the shock or stack. Another advantage is, that those, who cultivate herdsgrass, can always obtain their seed at a trifling expense of time and labor, while, as every tobacco planter knows, who has tried it, the clover seed must either be saved at a great expense of both time and labor, at a very busy season, or be purchased, and thus become annually a heavy tax. Another advantage of herdsgrass over clover, is, that land once well turfed, will remain so for years, while clover begins to decline after the second year. And again, clover is not only not valuable for grazing after the month of June, but actually deleterious to stock, and particularly to horses, mules, and sheep, while the herdsgrass affords fine grazing for every variety of farm stock throughout the whole year, with the exception of those portions of winter, when every species of vegetation is locked up with snow or frost. Farther, the herdsgrass when once sufficiently thick to form a strong turf, even on land really poor, will, in a course of years, restore it to tolerable productiveness; while on the same land clover will not grow sufficiently without the aid of manure, to produce any obvious improvement of the soil. More than twenty years experience has produced but little change in my views in regard to these grasses, except, that I am now persuaded that a judicious system of grazing ought to go with them, hand in hand. The long practice of seeding poor, thin and pipe clay flats, in herdsgrass, has satisfied me that there is scarcely any such lands that may not thus be brought, even to tobacco heart, and especially, where they are occasionally inundated. And I have long known, and probably you all know, that there is no land which produces finer tobacco than the old herdsgrass meadow. But I have yet to learn that any such land, or any other poor land, has been restored to tobacco heart by the use of clover alone.

I have but recently turned my attention extensively to the cultivation of herdsgrass on Bluestone, having from one or two failures to get a good stand, erroneously supposed that the fault was in the soil. I have ascertained, however, from the experience of the two last years, that it only requires, on oat land, to be seeded thick, immediately after the land is ploughed and before a rain ensues, to ensure a good stand. And that the soft, sandy hills, on the west side of the creek, present at this time as good a stand as any close, moist soil not more thickly sown.

While I would most urgently impress upon our Club, the importance of sowing grass exclusively, and especially herdsgrass, I am far from wishing to disparage, or enter the lists against clover. For I am myself pursuing the three shift rotation, of tobacco, wheat, and clover; and so far, have much cause to be gratified at the result. There is much too, depending on the peculiar situation of the farm, character of the land, and other circumstances, to determine the planter as to the expediency of cultivating the one or the other. I would earnestly recommend both, but with my present views, founded on the experience of others, as well as my own, I am constrained to give my most decided opinion in favor of herdsgrass, as a general improver; and in coming to this conclusion I have not lost sight of the benefits to be derived from either. For the value of any material or crop used on the farm for improvement to be fairly estimated must be considered in all the various uses to which it is applied; and in all these I consider the herdsgrass as adding to the resources of improvement, not even excepting the raising hay for market; for I doubt not that after abstracting the hay crop, the meliorating effects of the remaining turf, will richly compensate the owner for all the trouble and expense of preparation, seeding, &c.

In this part of the country, we have no available resources for manure but those derived from the farm and its appurtenances. We have no right to expect that marl, lime, plaster, poudrette, or any other substance of foreign growth or manufacture can ever be obtained here sufficiently cheap, to justify their general and extensive use. It becomes us, therefore, to cast about for some other material to supply their place; and to do this, we must (and the sooner the better) look at home, and here we may, in some measure, help to check that constant drain which empties our purses for the foreign capitalists and brings no corresponding benefits to ourselves.

Vegetable matter mixed with animal and other substances, must ever constitute our chief resource; and there is no vegetable matter more valuable, and none can be raised in greater

abundance for the purpose, than herdsgrass. Our branch flats, creek bottoms, and lands subject to inundation, might be profitably employed in its production. If it escapes the water, it will furnish the stock with food, if inundated, it will furnish them with litter. My own most valuable resource this year has been the yield of an inundated meadow, mowed and regularly cured and stacked in season—furnishing a quantity of good seed, as well as an abundant supply of litter. I prefer the herdsgrass, however, for food, and the quantity and quality of the manure raised from the stock to which it is fed.

Let me now, gentlemen, urge some considerations in favor of the artificial grasses which ought to come home to the feelings and the taste, as well as to the pride of our Club. Is there not something humiliating in having our eyes, whenever we ride or walk into our fields, greeted with the yawning gall, or the more hideous gully? or meeting by the wayside, the kine of Pharaoh, who, having devoured all the miserable trash and weeds, which mar the beauty of our fields, are themselves, just about to be devoured by the buzzards? How do these scenes contrast with the verdant grass springing up in all its vigor and luxuriance, and clothing our fields in its beautiful habiliments; with the cattle of a thousand hills grazing bountifully through the day, and returning home at eve laden with deposites, richer than those of the *mammoth bank*, and laying their grateful tribute at the master's feet, and causing his table to groan under the teeming abundance of milk, butter, cheese and beef?

This, gentlemen, is no ideal picture—it is in reach of every man who will adopt the cultivation of the artificial grasses, and avail himself of all the benefits which will result from their judicious and economical use.

Should doubts still remain after the interesting discussion of this subject had at our last meeting and what has come before us at this, they can only be solved by judicious experiments of our own, or observation of the experiments of others. Permit me to state, however, in conclusion, that there is one fact which ought to weigh with no little force on the minds of our Club, and that is, that we know no instance of a skilful and enterprizing farmer or planter, who after having gone fully into the cultivation of the artificial grasses, "has returned, like a sow that is washed, to her wallowing in the mire." And that we know no instance of a country in a high state of agricultural improvement, where the artificial grasses are not regarded as the main stay and the one thing needful.

With these views, gentlemen, I must close this subject, not, however, without expressing my regret that I have not had time to prepare something more worthy of my enlightened auditory and the interesting and important cause which has brought us together, and which it is to be hoped each member intends, to the best of his ability, to promote, whether in his own immediate practice at home, or generally throughout the bounds of the Club.

ASPARAGUS.

We see some writer in the "Farmers' Cabinet" advising the cultivators of this vegetable to let the stalk grow twelve or eighteen inches above the surface of the bed, and then to cut off six or eight inches of the top for the table.—This is an old story, and goes the round every spring. We will warrant, he who spoils one dish in this way, will never try it again. The very moment the shoot is exposed to air and light it begins to lose the delicacy and flavor for which the vegetable is remarkable. It is true that the bud is the tenderest part of the shoot, and that it retains its superiority even after it has begun to turn green from exposure, but this is not in consequence, but in spite of the exposure. A much greater improvement we should esteem a plan, we have seen lately recommended, of enclosing the shoot after it comes through the ground in a tin case, or hollow reed, or even covering it over with a common flower pot. By this means, it is said, it may be grown to an enormous size, without injury to its flavor.

From the Farmers' Gazette.

BUTTER.

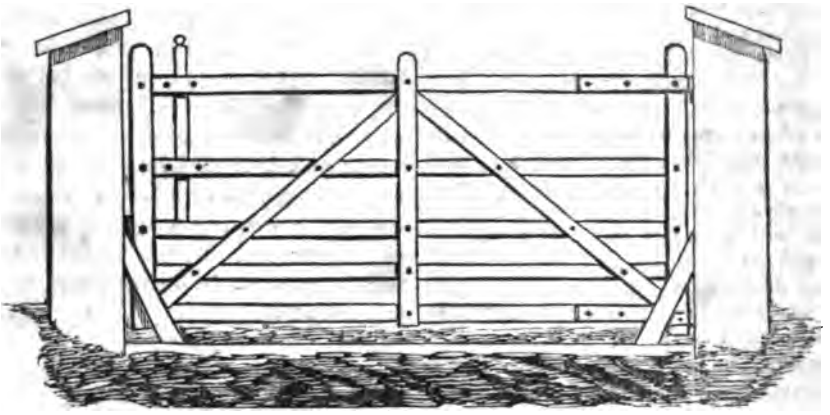
Manufacture and Preservation.—The good or bad quality of butter, depends much on the feed, age, and quality of cows. The best and greatest abundance of milk, is produced during four or five years of their middle age, when they are considered in their prime for all good purposes. The comparative quality of the different cows in a herd, is best ascertained, when they feed on grass only, as other kinds of food more frequently change the quality. Close observation is necessary, to ascertain the merits of each cow in this respect. The feed which greatly increases the quantity, generally depreciates the quality in some measure. Brewery grains particularly have this effect. Roots are generally an exception, as they make rich milk and greatly increase the quantity. Carrots, ruta baga, and mangel wurtzel, are preferable in our estimation to any other. Grass of a natural growth, or that grown on unmanured land, is preferable to that on rich and highly manured soil.

Cleanliness and pure salt are indispensable in making good butter, as every body well knows.

There is no butter that bears the West India climate equal to the Irish. Indeed we believe scarcely any other can be preserved sweet there, any length of time. This is probably owing, first, to their mode of scalding or melting it, in order to make it more compact, and expel all the butter-milk. And in the second place, to their custom of charring the inside of their firkins. This important fact should be known to every dairyman. The conservative power of charcoal, is well understood in the preservation of fresh meats, eggs, and every other article affected by exposure to the warm atmosphere. It is a perfect preventive of every bad quality imparted to the butter by wood, which is generally found in that put up in firkins. If surrounded by charred wood, the deleterious effects of the atmosphere, which is very searching, will be perfectly prevented. The charring should be so slight, as not to impart color to the butter.

For the Southern Planter.

GATE AND FIXTURES.



The above is a sketch of my manner of fixing posts and gates, which I think is superior to Mr. Rice's, as published in the last number of the Planter. The posts are planted three feet in the ground, which is important, and a sill is accurately fitted in between the posts, which will prevent them from inclining towards each other; in addition, there is a brace from each post to the sill, which still farther prevents the gate from swagging; but they answer the still better purpose of preventing careless drivers from running against gate or post, which is at the expense of the gate or vehicle, and not unfrequently giving fright to a young horse, from which he does not soon recover. You discover that the posts are capped, with an inclination outwards, by which they shed the water and are thereby preserved, and it looks as well as any other finish, when neatly done. The hinges are made to embrace the frame and to extend eight or ten inches on the top and next to the bottom rails with screws or bolts to pass through them. The gate is much stronger, as the rails cannot draw out from the frame, which is too often the case with the cuff hinge, or the hinge like Mr. Rice's.

The last number of the Planter is worth all of the subscription money. I think I shall keep a standing lot of the Jerusalem artichoke for my hogs. No root crop can surpass the sweet potato for hogs, but the artichoke has an advantage in its withstanding the winter, which supersedes the necessity of digging, and I would say of planting, if the hogs are taken off of them in good time.

If the tomatoes be as valuable for milch cows as the S. C. Advocate says it is, it is truly a valuable vegetable—none superior to it for the table—few equal to it for pigs and poultry, and the ripe fruit forms a most excellent application for the bite or sting of insects, allaying pain and destroying the effect of the poison almost instantly; and, to "cap the climax," I have been told by those who have tried it, that there is nothing better to destroy that dire enemy to "tired nature's sweet restorer," the bed bug.

Yours, &c.

ALBERT E. WRENN.

THE NUTRITIVE PROPERTIES OF DIFFERENT CROPS.

Our estimate of the nutritive value of different kinds of food is generally of a very vague and indefinite character; the ordinary farmer can estimate the effect of different supplies only by long and close observation; and indeed the health and growth of his stock is liable to be effected by so many causes, over and above the food they eat, that the result of his observations, even when closely made, may be far from satisfactory. It would be a great thing then, if by chemical analysis we could discover exactly the properties of different kinds of food; in producing for market, no such investigation is required, the best test of a saleable product being its market price; but the farmer wants to know whether to cultivate an acre of land in potatoes, or carrots, or sugar beets, or whether old-fashioned Indian corn is not more profitable than any of them. He can calculate the expense of cultivation of each; he can estimate the quantity of product in each, and if he could ascertain the comparative nutriment of each, he could at once draw a thorough comparison between them.—Vegetable substances, it has been long known, consist, invariably, of certain constituents, as gluten, albumen, gum, starch, water, salts, &c. in different proportions. Some of these principles are known to be more, and some less, useful in supplying the animal economy: the gluten, albumen, &c. it is said are converted by the vital functions into *flesh*, whilst the gum, starch, sugar, &c. are only useful in creating *fat*. It would seem then, that we would have only to ascertain the proportions of each constituent in a given substance, which chemical analysis will always do, to tell exactly for what purpose it is adapted. Accordingly, scientific men, from time to time, have endeavored to obtain this estimate by analysis: but unfortunately not always with the same results. Indeed, we presume, that the constituents of a vegetable will vary, to a certain extent, with the climate and soil in which it is raised, and we presume too, that these constituents may, in a measure, be differently appropriated by the digestive organs of different animals. Moreover, so intricate and complex is the chemical action of compound substances, especially when subjected to vital action, that nothing can be predicted without an *exact* knowledge of *all* the constituents present in any given case. Although these circumstances, unfortunately, render the deductions from chemical analysis even more uncertain than those drawn from common observation, yet the use of both methods may lead to more certainty than could be obtained from the sole application of either. We give to our readers, therefore, the latest estimates of the celebrated French chemist, Boussingault, on some important points. He found that the nutritive properties of

100	bus.	of	beans	was	equal to 120	bus. of yellow peas.
100	"	"	"	"	191	" of wheat.
100	"	"	"	"	200	" of rye.
100	"	"	"	"	232	" of barley.
100	"	"	"	"	246	" of Indian corn.
100	"	"	"	"	1,096	" of potatoes.
100	"	"	"	"	1,361	" of carrots.
100	"	"	"	"	1,446	" of cabbage.
100	"	"	"	"	2,383	" of turnips.

Dr. Dana, of Massachusetts, has also lately made a comparative analysis of corn, ruta baga, and potatoes, from which he has deduced the following table:

100 *lbs. of*	*Corn.*	*Ruta Baga.* fresh dug.	*Potatoes.* fresh dug.
Contain of flesh forming principles: gluten, albumen, &c.	1.26	1.	2.07
Fat forming principles: gum, starch, sugar, woody fibre, oil, &c.	88.43	13.	24.34
Water,	9.	86.	72.
Salts,	1.31	1.	1.39

For the growth of animals and the formation of flesh, it will be seen, that Dr. Dana places a very low estimate upon Indian corn; whilst he esteems it very highly for the formation of fat. Without drawing this distinction between fat and flesh, Boussingault estimates its nutritive properties infinitely above both potatoes and turnips.

SOOT AS A MANURE.

Improvements in agriculture, scientific and mechanical, are and will be the staunchest props of the landed and farming interests; it is with regret, therefore, that we ever observe a want of candor among those who ought to act as brethren. Much has been said lately of a new and highly fertilizing manure—one which will enable land to sustain and bring to the highest condition successive crops of the same plant.—But why does any secret attach to discoveries of such deep import? Why are a few vague hints dropped, which tend only to mystify, and excite conjecture in the minds of thousands?—Is individual profit to be the result? We are told that the basis is carbon or some carbonized substance; but the same thing might be said of starch, sugar, malt-dust, or any other vegetable product. While we are thus left in the dark,

and, with Macbeth, must be content with the question, "Can such things be true?" it is consolatory to refer to the evidence of facts, such as are detailed in that estimable article by John Morton, Esq., in No. XLI. of the Royal Agricultural Society of England, Vol. I. part iv., giving an account of the mode of cultivation adopted on Stinchcombe Farm, by Dr. Dimmery. Herein we perceive a simple three-course rotation practiced for more than twenty-five years, with increase rather than diminution of produce, and wherein one of the chief fertilizers is *cool soot*. "The general price is 6d. per bushel, the quantity used on the farm is upwards of 3,000 bushels a year, one half of which is applied to the *potato* and the other to the *wheat crop*." A large flock of sheep gives "tail-dress," preparatory to turnips, which follow the wheat, and intervene between it and the potatoes. It is not the present object to enter into any further detail of the particular routine, but merely to make use of the preceding quotation as a prelude to the question of soot as a manure. "We have not," says Mr. Morton, "been able to obtain from Dimmery an idea of *how* soot acts in producing such effects, as it evidently *does* both on the potato and wheat crop; the effect of it is particularly evident on the wheat, for however sickly it looks in the spring, its color and the vigor of its growth is changed in a few days after it has been applied." p. 401. Whatever may be thought of the limited and special applicability of soot, yet where it *does* suit, and is proved by continuous facts to be eminently useful, even when applied in quantity so small as twenty-five bushels to the acre, in such places it is, to all available intents and purposes, the very compound itself which comprises the essentials of the vaunted, mystified, preparation of carbon, that now bores the imagination.—Soot is the purest carbonized product of mineral coal; it contains oil and volatilized resinous matters, and above all, a fixed neutral salt of ammonia, which is perfectly soluble in watery menstrua, but retentive of its ammonia till a more powerful alkali displace it; then as by mixture with lime, potass, or soda, the volatile ammonia is liberated, and revealed by its pungent odor. Without ascertaining what may or may not be the components of any nostrum, we unhesitatingly offer a strong opinion of the efficacy of soot—an efficacy not to be rivalled or surpassed by any known preparation whose chief component is free carbon.

Mark-lane (*London*) *Express.*

SALT FOR GRUB WORMS.

In our last volume we recommended the application of a spoonful of salt to the hills of corn or cabbage to prevent the ravages of the cut or grub worm. We have noticed many testimonials to its efficacy since, and consider it more than ever worthy the attention of our readers. It is advised to apply it in quantities from one to two table-spoonsful on the surface of the hill without placing it in contact with the corn.—One individual remarked that a lot of cabbage plants watered from a salt pork barrel daily, escaped the ravages of the worm, whilst the neighboring plants were entirely destroyed.

EFFECTS OF CULTURE.

The almond, with its tough coriaceous husk, has been changed by long culture into the peach, with its beautiful, soft, and delicious pulp; the acrid sloe, into the luscious plum; and the harsh, bitter crab, into the golden pippin. Attention to nutrition has produced quite as marked changes in the pear, cherry, and other fruit-trees; many of which have not only been altered in their qualities and appearance, but even in their habits. Celery, so agreeable to most palates, is a modification of the apium graveolens, the taste of which is so acrid and bitter that it cannot be eaten. Our cauliflowers and cabbages, which weigh many pounds, are largely-developed coleworts, that grow wild on the sea-shore, and do not weigh more than half an ounce each. The rose has been produced, by cultivation, from the common wild-brier. Many plants may be modified with advantage by suppressing the growth of one part, which causes increased development of other parts.

AMMONIA.

Since the publication of Liebig's work on vegetable chemistry, it has been assumed that the ammonia constituted the most valuable part of stable manure. To arrest and retain this volatile gas then, has been the great desideratum. The use of plaster, the sulphate of lime, has been recommended for this purpose. It is advised to be strewn over the stable litter before it is removed from the stall. In this case, Liebig says, a double decomposition will take place, from which will result, sulphate of ammonia, and carbonate of lime; by this means, the ammonia will be retained in a soluble shape for the use of plants. Mr. Partridge, of New York, who proclaims himself a practised and experienced chemist, denies that any such action will result from the combination, at atmospheric temperature. Now, *nostrum tantas componere lites*, that is, it is not for us to decide when doctors disagree. But we see it recommended, possibly

by way of settling this vexed question, to scatter common salt on the dung heap, or to water the litter of the stalls well with strong brine, an hour or two before removal. From this mixture, result, it is said, muriate of ammonia and carbonate of soda. In noticing this suggestion touching the salt, the Editor of the "American Farmer," whose practical experience is worth a hundred theories of the most learned chemists, says,

"We are not chemist enough to avouch for the action of salt in the manure heap as above described; but this we can state, that some years back, we bought twenty barrels of rotten fish to use as manure for corn. In each of these barrels there were about half a bushel of fish salt, of course, highly charged with the oil of the fish. After using the fish in the hills of corn, one to each, we mixed the salt with ten loads of barn-yard and stable manure, suffering it to remain a few days, when we turned it over with the shovel and gave it a more thorough mixing. We then hauled it out to the field, and spread it on half an acre: on an adjoining half acre, we spread ten other loads of the same manure, but unmixed with salt. We ploughed up the piece of ground and planted the whole in corn. The half acre of corn planted on the ground fertilized with the salted manure, grew from the start more luxuriantly, looked of a darker green throughout the season, and yielded more grain than that on the adjoining half, though the soils were precisely alike, and each had received the same quantity of barn-yard and stable manure, and the same culture. The blades on the salted part maintained their greenness until pulled, although those on the other part, when pulled, were considerably *fired*. It is here worthy of remark that the ears on the former were some days later in hardening.

"We have stated the above fact; and without referring the result of our experiment, at the time, to any chemical combination between the salt and the ammonia of the manure, we were induced by our observation of the effect produced, to conclude that the *salt* used, had imparted to the earth the *capacity of attracting* from the atmosphere more moisture, as well as that of preserving it longer from the evaporating influence of the sun's rays; for the surface of the earth always looked, and was, in fact, much more moist than that of the contiguous piece of ground. What we looked upon at the time as unevaporated *dew*, may have been the *ammonia* abstracted from the atmosphere, and fixed, through the chemical agency of the salt upon the surface, and there made to await absorption by the earth, thence to be taken up by the roots of the plants as nutriment. If this union takes place, and, we have no right to question it, for the result of our experiment would seem to corroborate the assumption, SALT must form a most valuable acquisition to the dung-heap, as any substance, not too costly, which can give fixedness to the eliminating properties of manure—which can prevent the escape of the rich gases—must operate greatly to the advantage of the husbandman, because it would impart to his fertilizing materials, a degree of durability which, alone, they do not possess—and this property of salt, we should think, would be greatly increased in value, in sands and other porous soils, where, as it is known, the effects of manure are much less lasting, owing to the escape of its volatile parts.

"But whether the chemical action imputed to the salt be as stated, or not, we have no hesitation in affirming, that every farmer, who can afford to incur the cost, should procure a few bushels per acre, to mix with his manure intended for his corn ground, as it would prevent injury from the cut and grub worm, as was proved by our experiment; for although the corn on that portion of the ground where the unsalted manure was used, suffered greatly from the ravages of these enemies, that on the part where the salted manure was used, escaped without any injury from them.

"The quantity of salt used by us was greater than we would recommend. It was at the rate of twenty bushels per acre: having it, we used the whole as stated; but we think that five bushels per acre would have answered equally well for the time being. In other experiments which we have made with salt, in sowing it broadcast over turnip ground, after it was manured, ploughed and harrowed, we only used six bushels per acre, and witnessed the finest effects from it on a corn crop grown on the ground the succeeding year."

SUBSTITUTE FOR CREAM.

Beat up the whole of a fresh egg in a basin and then pour boiling tea over it gradually to prevent its curdling. In flavor and richness this preparation closely resembles cream.

THE DUKE OF NORTHUMBERLAND.

We have the pleasure of presenting to our readers on the opposite page, another portrait from the celebrated stock of Short-horns, belonging to Thomas Bates, Esq. of Kirkleavington, England. The pedigree of this animal is of the deepest kind, and his appearance is equal to his breeding. The artist has hardly done him justice in the loin and quarter, but his beautiful, fine, masculine head, wide, deep brisket, and round barrel, are to the life. His color is a

rich roan, intermingled with a few patches of red and white. He is an animal of great presence and finished action, and upon the whole, the choicest bull we ever looked at. He has been repeatedly exhibited with his dam, Duchess 34th, at the great Agricultural Shows in England, and was never beaten.—*Am. Agriculturist.*

For a splendid portrait of the "Duke of Northumberland," now considered the finest bull in England, we are indebted to the kindness of the Hon. Andrew Stevenson, Esq. The picture, which was presented to Mr. S. by Mr. Bates, the owner of the "Duke," graces our office walls, where our visiters, for whose benefit it was intended, can have an opportunity of seeing for themselves to what matchless perfection this noble animal can be brought—on paper, at least. We are assured, however, by Mr. Stevenson, that superb as the picture is, it is by no means a flattered representation of the original.

Our ex-minister, who has been an importer of some of the finest stock in America, talks of agriculture with a *gusto*, that leads us to think, that his capabilities as a farmer, are only second to those he has exhibited to the world as a diplomatist.

TO HOUSEWIVES.

Recent experiments in more than one family in this city, says the Delaware Gazette, have established that the plant known to botanists as the *Pologonum punctatum*, commonly called water pepper, or smart weed, and which may be found in great abundance along ditches, roads, lanes and barn-yards, is an effectual and certain destroyer of bed-bugs. It is said to exercise the same poisonous effect on the flea. A strong decoction is made of the herb, and the places infested with the insect are carefully washed therewith. The plant may also, with much advantage, be strewn about the room. Elderberry leaves, laid upon the shelves of a cupboard, will also drive away roaches and ants in a very short time.

PLOUGHING.

We make the following extract from a letter to the Editor of the "Agriculturist," on the subject of ploughing:

"Plough from the *middle* of the *land* out.—The usual mode is to plough from the *out edge* of the land to the *middle*. In ploughing from the *middle*, *out*, the team must at each *end* be turned to the *right*. In following this course two things are gained: 1. The team has firm ground on which to turn, and is not fatigued by having ploughed land to turn on. 2. The ploughed land is not trampled by the team being turned on it. In ploughing from the out edge of the land to the middle, the team is unnecessarily fatigued by turning on ploughed land, and the ploughed land is so much trampled as to require a second ploughing. Try this; if you have not heretofore practised it, it will be awkward at first, perhaps, but when you adopt it once, you will not be apt to abandon it. These remarks have reference to stubble land, not to sod,—though to some extent they are applicable to sod land. GEORGE W. WILLIAMS."

IT HAS COME AT LAST.

We have it now. The latest and most interesting information we have to impart to our readers, is, that Mr. T. H. Bickes, of Frankfort, Germany, has discovered a method of growing the most luxuriant plants in the poorest soil without manure, and without cultivation; we are not sure whether he finds it necessary even to use seed or not; at any rate, they will undoubtedly be dispensed with as soon as the process arrives at a higher degree of perfection — This wonderful process, strange to tell, has been in use in Germany for the last twelve years, although, of course, it remains a profound secret; *extremely profound*, we haven't a doubt.

At one of the late agricultural meetings in London Dr. Jackson *guessed* that seeds might be coated with some gummy substance, and then rolled in guano, whereby all the wonders of this extraordinary "secret" might be produced.

HOW TO PRESERVE HEALTH.

It is stated in a foreign paper that M. Fourcault, a French physician, has recently made some important discoveries and experiments, which go to show that an important means of preserving or of restoring health is *a due attention to the access of air to every part of the body.* He succeeded in producing, at pleasure, in animals, before healthy, suppressions of perspiration, conjestions of the blood, the derangement of the internal organs, affections of the heart, and the foundation of aggregation of matter in the lungs analogous to the tubercles in pulmonary consumption, and even death itself as the consequence.

The means by which he arrived at these results was the simple prevention of the access of air to the skin, which, by checking the functions of perspiration, caused the matters usually carried off through their agency to be thrown back upon the internal organ.—*Boston Journal.*

For the Southern Planter.

AGRICULTURAL APHORISMS.

NO. II.

My eye has been upon you, and sure enough you have read my first number of hints—I now send a second.

A. Well neighbor B. what do you think of rotten wood as a manure?

B. I think it is no manure at all, but a poison to land.

A. Well what do you think of chips as a manure?

B. When they have rotted they are first rate.

Christ directed the apostles to take up the fragments that "nothing be lost," which is equivalent to saying take up the fragments, that every thing be saved. So will every wise farmer obey the command, by appropriating every fragment and atom to its proper use. The Chinese manures his ground with the beard which he shaves from his chin; and if you say this is nothing, so is a grain of wheat, consequently so is a bushel of grains.

I write whilst I am resting, and rest whilst I am writing.

The blindest of all is he that will not see—so we often see persons blundering over lots of manure, and articles which can be converted into it, yet say they have nothing of the kind.

The farmer and the usurer are the only two characters who are accumulating whilst asleep. Nature is at work for the first and art for the last. Nature never errs, but art frequently fails.

When I want to see what my people are doing *on* the mountain I take up my telescope; when I want to see what they are doing *behind* the mountain I take up my SOUTHERN PLANTER.

The best book I ever read was the Bible; well, in one place it says positively that, "if one work not, neither shall he eat."

A few days past I learned that one of my neighbors gave away a fine chance of manure, because he had no time to cart it on his own lands. Now, reader, this is not so bad a story as you might suppose, for friend, remember the story of the dog in the manger.

A youngster once inquired of a substantial farmer why he did not dress finer? to which the farmer replied, my son, I have just spent $500 for a fine coat to put on one of my fields, and I could not at this time afford a new one for myself. Furthermore, I will say, that if you have cause to be proud of the fine coat which covers your little back, I should be more so of the fine dressing which I have put on my broad field. When your coat has faded, mine will be of bright color, and when yours is tattered, mine will be thicker and stronger.

ARGUS.

Amherst, April, 1843.

STONES ON CULTIVATED LANDS.

It is an error to suppose that stones should be entirely removed from land which is under cultivation. The stones which would be in the way of the scythe while mowing, of course should be removed, but all the smaller ones should remain; and if wholly or partially embedded in the soil, they preserve the moisture during a drought, and thus serve materially to increase the crop. The following article from the Gentleman's Magazine, published in 1773, is to that point:

"It has been long known to experienced farmers, that taking away very small stones and flints, is detrimental to ploughed lands in general; but more particularly so to thin light lands, and all lands of a binding nature. It was, however, never imagined that the damage could be so great, as it is now found to be, since unusual quantities of flints and other stones have been repeatedly gathered for the use of turnpike and other roads. In the parish of Sterenage, in Hertfordshire, there is a field known by the name of Chalkdell field, containing about two hundred acres; the land in this field was formerly equal, if not superior, to most lands in that county; but lying convenient for the surveyors of the roads, they have picked it so often, and stripped it of the flint and small stones to such a degree, that it is now inferior to lands that were formerly reckoned not much over half its value, acre for acre.

"Nor is it Chalkdell field alone that has materially suffered in that county by the above mentioned practice; several thousand acres bordering on the turnpike roads from Wellwyn to Baldock, have been so much impoverished, that the loss to the inheritance forever, must be computed at a great many thousand pounds. What puts it beyond a doubt that the prodigious impoverishment of the land is owing to no other cause but picking and carrying away the stones, is, that those lands have generally been most impoverished, which have been most often picked; nay, I know a field, part of which was picked, and the other part ploughed up before they had time to pick it, where the part that was picked, lost seven or eight parts in ten, of two succeeding crops; and though the whole field was manured and managed in all respects alike, yet the impoverishment was visible where the stones had been picked off, and extended not an inch farther; an incontestible proof of the benefit of the stones."—*Exchange paper.*

SWEET POTATOES.

We have been endeavoring, since the receipt of Mr. Hatton's communication, to comply with his request by obtaining Mr. James Gordon's method of managing the sweet potato. Although

the information comes too late, perhaps, for the growing crop, we avail ourselves of the opportunity afforded by a visit from Mr. Gordon, to transfer his views to our columns for the future use of the reader.

Land intended for sweet potatoes should not be manured too highly—a light, sandy loam, which would bring five or six barrels of corn to the acre, is to be preferred. If the ground is too rich, a luxuriant growth of vine and a large quantity of small and indifferent roots will be produced.

To grow the plants, prepare a hot-bed by laying down ten inches of strong, fresh, stable manure, and cover it with an inch of good surface mould. Upon this lay down the potatoes, as thick as they can be placed, and when the sprouts begin to break ground, cover your bed an inch thick with the poorest sand you can find. This will smother the grass and save the labor of hand weeding. The proper stage for setting out, is when the sprouts just begin to turn down, preparatory to running into vines.—When they have arrived at this state, they are to be plucked off by introducing the finger and thumb as closely as possible to the parent root, taking care not to bruise the plant more than is necessary in the process.

To prepare the field for the reception of the plants, it should be deeply and freshly stirred: it should then be thrown into ridges, ten inches high, four feet apart; if the plough does not make the ridge of sufficient height, the earth must be drawn up with the hoe; as it is important that the plants should be placed in a high and dry position. After the top of the ridge is levelled, proceed to set out the plants, fifteen inches apart. As soon as they have taken hold, run the plough as close as possible to the plant, turning the earth from it on each side; clean out the ridges between and about the plants with the hoe and hand, taking particular care never to let the grass grow upon the ridge.—The next process is to hill up the plant by throwing the dirt to it on each side, when the hoe and hand should be again put in requisition, if necessary, to complete the hilling or to uncover the bud. After every rain, the vines should be examined, and wherever a joint has put forth a root, which many will do, it should be severed from the earth, else your product will consist in a great number of little tubers, instead of a smaller quantity of fine potatoes.

This is all the cultivation that will generally be necessary; but the crop must at any event be kept clean and free from grass.

Mr. Gordon has never succeeded well in keeping the potato, although he has tried many plans; if he could discover a mode of keeping in which he had confidence, he would prefer the crop, as a food for stock, to any he ever raised.

CURE FOR WORMS IN CHILDREN.

A writer in the Farmers' Register, who being a slaveholder has a large family under his care, says that for nearly thirty years he has found the following preparation a certain cure for worms: "Take the fat of old bacon, sliced and fried in a pan until the essence is all out of it, take out the rind first, then put in as much wormseed (vulgarly called Jerusalem oak,) as is necessary, as much sugar or molasses as will make it palatable, and give it three mornings in succession. The children will eat it freely—some you will have to restrain from eating too much. Incredible as it may appear, I have known as many as one hundred and twenty or thirty large worms come from a child three or four years old. I usually give the medicine spring and fall.

For the Southern Planter.

RECIPES.

Messrs. Editors,—The following are the recipes obtained in Maryland, to which I alluded in my last:

Recipe for Dyeing Green.—Take ½ lb. of oil vitriol, 2 oz. indigo—put in a bottle and let it stand three or four days; shake it well every day; then boil a strong liquor of hickory bark; dissolve 2 lbs. alum in water, put 6 lbs. yarn in the alum water, pour all the ingredients into the dye, put it all on the fire, and boil it well. The same dye will then color 6 lbs. more of a paler green. After it is dyed, and dried, it must be washed out with good soft soap.

To Dye Red with Red Wood.—1 lb. red wood, (hacked) 2 oz. alum, powdered; the red wood must stand twenty-four hours in river or spring water; then boil it well, and after straining, mix your alum and aquafortis and boil it well for several hours. Mix 1 oz. aquafortis, 1 oz. block tin, in a tumbler, and set it in the sun about one hour. The above will color 2 lbs. of yarn.—After being dried, wash out with soft soap.

To Dye Pink.—2 oz cochineal, ½ lb. cream tartar, 1 lb. alum, the whole put in a kettle of soft water; then put in 6 lbs. clean yarn, and boil it well; not to be washed after being dried. I saw several very beautiful carpets that were dyed with the above recipes, and for brilliancy of color, they would compare with the finest

Turkey. I was particularly struck with the substantial appearance of one carpet, and on inquiry, was informed that the filling was entirely cow's hair, carded and spun by hand; the cost was but a trifle, and a more durable looking carpet I never saw. I think the whole filling of cow's hair, all white, did not exceed two dollars for a whole carpet. Persons near a city would do well to turn their attention to the manufacturing this article, as it has generally been deemed useless. A small quantity of cow's hair, with the inferior and coarse wool, would make a carpet that would outlast any carpet that could be bought: and in these hard times, every thing that tends to economy should receive attention. Politicians may rant as much as they please as to the why and wherefore, and settle the *cause* of hard times among themselves, but when they come to the *remedy*, they will find that nothing but industry and economy will afford relief.

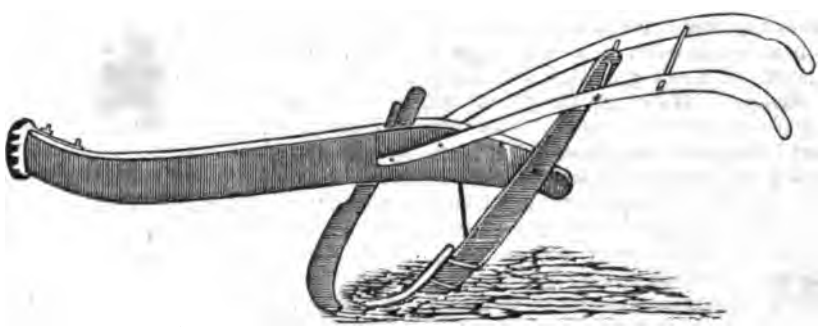
Yours, respectfully,

GEORGE W. CRAVEN.

Franklin, May 10, 1843.

For the Southern Planter.

A JUMPING COULTER.



Messrs. Editors,—I noticed that in No. 4 of your valuable periodical some allusion is made to the form of a grab for getting up ivy roots, &c. Now, I don't know much about '*grabbing*,' but I will try and give you a description of a plough that is in common use in this country, that will destroy ivy and every other small growth with which it comes in contact. We call it a "jumping coulter." Our mode of clearing our forest lands is to cut off every thing (with the exception of the large trees) close to the ground: we then rake off the trash, and put the "jumping coulter" to work, with three mules hitched to it, and they break it up thoroughly, cutting and tearing almost all the grubs and roots to pieces; we then cross-plough it with the same implement and the land is ready for cultivation. You would be astonished to see what large roots will be severed by the coulter-plough, which I will now endeavor to sketch and describe.

In the first place, you have a shovel made, such as is common in Virginia, only much stouter, that is, much thicker: then, have a coulter made of bar iron, one inch thick, and two inches wide, shaped as in the drawing; this coulter is to be layed on the front with the best cast steel, and brought to a perfect edge; it is all-important to keep the coulter sharp, which must be effected by grinding whenever necessary. The temper should be as much regarded as that of any other cutting tool. The wood work is like that of other ploughs, except, that it must be made uncommonly strong and heavy. The coulter must be put in the beam inclining as represented, and as it wears shorter, it must be driven down, so that its point will always be kept about two inches below the point of the shovel.

If we had to grub our lands in the old Virginia fashion, a man would hardly open a farm in his lifetime; for the growth here is heavier, and the roots twice as numerous as with you. We use a hoe something like your grubbing hoe, only it is broader and is layed with steel, and with this we cut off every thing under the size of a man's arm—the larger growth we cut with axes. You know, and every body else who has had any clearing to do, knows, that a hand can cut off in this way three or four times as much as he could grub.

Another advantage in these ploughs, is, that

you can break so much more land in the same time than can be done in the old way, that is, with the common coulter; for if the jumping coulter comes in contact with any thing that cannot be cut in two (even if it is a stump) it will immediately hop over, and strike into the ground on the other side. Instead of hanging in a root or stump, and whooping and hallooing to back the horses and extricate the coulter, with this fixture, your plough is continually going on, doing the best work I ever saw done in new ground.

Your obedient servant,

R. C. DICKINSON.

Spring Grove, Todd Co., Ky, April 19, 1843.

For the Southern Planter.

VEGETABLE AND ANIMAL SUPPORTERS.

NO. II.

Water.—Water is one of the great vegetable and animal supporters: it exists in three distinct forms—solid, fluid and vapor or gas; if a small degree of heat enters water in a solid state it becomes liquid; if a still greater, it is changed to a state of vapor. Water is a compound, and not a simple elementary substance; containing oxygen and hydrogen in the proportions of eighty-five parts of the former, to fifteen of the latter. It congeals at 32° of Farenheit's scale, boils and becomes vapor at 212°, and evaporates at every point of the thermometer without being decomposed: a very high or very low temperature promotes combustion, hastens its decomposition, and if confined, it becomes ignited. The atmosphere sustains water 34 feet, viz: a column of water of a given diameter is equal in weight, to a column of air of the same diameter, extending to the height of the atmosphere: so that we can by removing atmospheric pressure from fountains, raise water 34 feet; beyond it, forcing pumps are necessary. Water is conveyed over valleys, under ground, and may be carried over mountains whose height does not exceed 34 feet above the fountain; provided a syphon be first filled with water to exclude air. Springs are supplied from elevated fountains—they are continued, reciprocating, intermitting, or remitting, depending on the supply of the fountain: there are also, natural and artificial jets of water; daily, weekly and monthly springs, and occasionally rivers. Such springs have syphons under ground, communicating with the bottom of the reservoir above, and as the angle of the syphon reaches the height of the fountain, water cannot flow until it passes the angle; then it descends through the longest arm of the canal, and falling below the bend of the syphon, causes the stream to weep, stop and run alternately, according as more or less time may be required to fill the fountain. The atmosphere is loaded with water in a state of vapor, and if suddenly condensed would deluge the earth: when raised by heat, it is condensed and returns again to the earth, variously modified into dew, mist, rain, hail and snow. The particles of water, have a strong affinity for each other; clouds passing over arid countries, seek a humid atmosphere and find their way to water courses; blending and uniting with moist clouds from the ocean. Many tribes of plants, are nourished and supported by air and water alone; our seas are frequently covered with weeds and mosses in such large masses as to obstruct the progress of ships.

Water is contained in all bodies, in a greater or less quantity, and is either in a state of simple mixture, or in a state of combination. In the first, it renders bodies humid, is seen by the eye and may be disengaged with facility: in the second, it exhibits no character showing it to be in a state of mixture. It exists in this form in the wonderful variety of salts, crystals, plants and animals; imparting to them transparency, strength and firmness. Crystalized quartz, gems and diamonds, lose all transparency when deprived of their water of crystalization. Many bodies are indebted to this fluid for their fixity, the acids, for example, acquire fixity by combining with water. This element is the grand solvent and the grand cement of nature; without it the vegetable and animal kingdoms become skeletons, the mineral world loses its force of cohesion and tumbles into dust; the great globe itself a pulverulent mass, and if attraction be removed it will cease to exist! Water facilitates the coagulation, re-union and consistence of the particles of matter, and when disengaged from its combinations and in a state of liberty, is one of the most powerful agents on earth. It bears a part in the formation and decomposition of all bodies in the mineral world—is the life of vegetation, aye, and the death too—animals are dependant on water for the free exercise of all their functions, and it hastens and facilitates decomposition as soon as they are deprived of the principle of life. This fluid has never been compressed, but is very obedient to the action of heat, by which it expands and fills immensity. Its pressure upwards, downwards and laterally, is the same at any given depth; the upper particle in any column presses upon the next particle with its whole weight, and is equally pressed upwards by the re-action of the second: the pressure upon the bottom of a vessel, is equal to the product of the area, multiplied into the perpendicular altitude of the longest column; and in two vessels of equal bottoms, the pressure will be proportionable to the perpendicular altitude. To find the pressure on a mill-dam, multiply the area of the dam in square feet, by half the depth and that product by 62 pounds, the weight of a cubic foot of water.

Bodies of water, large or small, are regularly convex, being part of a sphere of the same magnitude with the earth: a vessel of water at the centre of the globe, would run over through the whole of its ascent to the surface; as its convexity would continually decrease while receding from the centre. One body of water however small, will balance another however large, which seems to be a hydraulic paradox. Branches, creeks and rivers, are inclined planes, and yet their velocity is not accelerated; the resistance of the sides and bottom causes uniform motion: hence the water moves slowest near the sides and bottom because of the greater resistance. If a dam be thrown across a stream, the water becomes refluent from one point to another, until it reaches the height of the dam; the refluent point is then at rest. The velocity of a stream is greatest where the bottom has the greatest declivity, and where the velocity is least, the breadth or depth is greatest: the same quantity of water, however, must pass through every part of a stream, deep or shallow, broad or narrow in the same time; otherwise some parts of the channel would become dry: where the channel is narrow the velocity is greatest, and the reverse when wide and extended.—Hence the momentum of moving waters in the whole river at any particular section, is the same. Rain water is the standard for comparing the specific gravities of bodies; a cubic foot weighing 62 pounds avoirdupois: then as the difference between the weight of any body in air and water, is to its weight in air; so is 62 pounds to the specific gravity of the body; in this way we may compare the specific gravities of any number of bodies. The weights of bodies of the same magnitude, are to each other as their specific gravities; the specific gravity of gold is 19, viz: gold is 19 times heavier than its bulk of rain water. The most brittle and delicate substances, are embraced and protected by water; the thinnest glass or egg shell, bears the greatest pressure, without being broken when immersed in this fluid. It is yet a doubt with the philosopher, whether water in its gross state, enters directly into the composition of plants; the probability is, that when it comes in contact with their roots and leaves, they cause a decomposition of this element, and after performing the great work of elaboration, and evolving sap, oil, mucilage, sugar and other secretions, these principles again unite and form water. But of this we know nothing, it is all doubt and conjecture; we know, however, that water is obtained from plants by pressure, excision, heat, &c. which is proof positive that it is a component part of vegetables. GALEN.

P. S.—Correct an error in the first number, viz; for "5,500 species of plants," read 55,000 species of plants, and oblige G.

For the Southern Planter.

TO PICKLE STURGEON.

If you wish to make a round, take the back bone out without cutting it in two, wash it and lay it in salt water not very strong, that day and night, the next day, put it in a strong brine; the third day, wash it, tie up the round with a cord, then boil it until you can run a straw through it; then take out the large scales, and draw the cord tighter; if you find it is not salt enough, set it on the end and sprinkle it with salt, let it remain until the next day—whilst it is boiling, skim off the oil; when it is done, take all the oil off the liquor and strain it: to two gallons of liquor, put four table-spoonsful of allspice, two table-spoonsful of pepper, two pods of red pepper, boil the spices in the liquor well; if it requires more salt, add it to your taste, then put it in the vessel in which it is to remain when cold, add half a gallon of strong vinegar and put in the sturgeon. It will be fit for use in twenty-four hours.

We received the above from one of the best housewives in Virginia, but our trial with it was a total failure: we hope our friends may have better luck.

RECOMMENDATIONS.

We have been not a little surprised lately at receiving orders for articles upon the faith of our having recommended them so highly, when in truth we knew nothing more about them than the person sending the order. We hope we are not to be held responsible for every puff and recommendation that may appear in the Planter. We admit freely, statements on both sides of any subject, and express our opinion when we please; for any statement made upon our personal knowledge, we are of course responsible, but no man in his senses will attempt to extend the principle any farther. For instance, in the last Planter "Exall & Brother" advertise and describe, over their own signature, a threshing machine, which we have never examined, and immediately one gentleman writes to make further inquiries about this machine, which, he says, is so highly recommended by us. Again, We announce ourselves the agents for Bommer's method of making manure, and insert an advertisement of Mr. Bommer's, over his own name, describing its excellencies, &c. To this we append a statement that we had understood at the North, that Mr. Bommer was there considered a gentleman and a scholar, and that we met with many who, without trying it had

formed a favorable opinion of its merits. This was all we said; for it was all we knew. Well, a gentleman immediately encloses us twenty dollars for the method, as he says, entirely upon the faith of our recommendation. Now, we protest against this buckling responsibility on our backs, whether we will or no. As faithful chroniclers, we are bound to tell all we know, hiding nothing, concealing nothing; but this is all you can ask, and if with a knowledge of all the facts, you come to an erroneous conclusion, that is your lookout, not ours; if even our poor *opinion* should serve to mislead you, we should *regret* it, it is true, but if conscientiously given, we cannot *repent* it.

We beg our friends to notice the distinction between statements made by us on our individual responsibility, and statements appearing in the Planter from other sources. Whilst we will not permit our readers to be mislead by what we know to be the *mis*statements of others, we can never consent to be considered responsible for the truth of all that appears in the paper.

For the Southern Planter.

BUCKWHEAT.

Messrs. Editors,—I see your correspondent Mr. Ship asks for information for raising buckwheat, and since our wheat crop is so precarious, I think we should not rely on it altogether, and in a mixed crop I know nothing better than buckwheat. I have a little practical knowledge about its culture. I will endeavor to give it.—As to soil, sandy loam is best: a northern exposure of any good land will bring buckwheat. The ground should be prepared as for any other small grain. I have generally sowed three pecks to the acre; cut when half the seed is ripe, taking care to cut in the morning when the dew is on, or on a damp day, as it shatters very much when cut dry. I have generally seeded just before going into harvest, but any time before the first of August will make a good crop, if the season is not too dry. It should be set up in small armfuls, and twisted at the top to keep it from falling down; it should stand until you are ready to thresh; it can be hauled to the barn in a tight body or threshed in the field. It is the best grain that is grown for fowls, and it is very fine for bees, as they make a quantity of honey from it at a time when they cannot get any thing else: ground, it is fine for hogs or horses. There is some art in making good flour, as the hull is black. The plan adopted by my father, who owns a mill, is, to hull it by raising the millstones just so as to rub the hulls off, then he runs it through a fan and mixes a small quantity of wheat and corn, and grinds and bolts the whole together. The cakes that are made from this flour, with good butter, are "hard to beat," and if friend Ship should have the good luck to make an abundant crop, and will *ship* some of his flour, made as above, to Richmond, he will find pretty ready sale for it. Take care and keep it clear of grit.

Yours, respectfully,

GEO. W. CRAVEN.

IMPORTANT TO FARMERS.

A NEW ERA IN THE HISTORY OF AGRICULTURE.—MEETING IN FLATBUSH.—It will be observed by the following statement that every farmer may now manufacture any quantity of manure he may require for his own use.

A committee consisting of the following gentlemen, Elias Hubbard, Esq. of Flatlands; Ferdinand L. Wyckoff, of New Lotts; Michael Stryker, of Flatbush; Henry S. Ditmas, of Flatbush; Johannes Lott, Jr. of Flatlands, appointed from a large company of farmers, assembled to examine Mr. George Bommer's method for making vegetable manure by fermentation, on the premises of Garret Kouwenhoven, Esq. of Flatlands, in this county, respectfully report,

That after careful examination of a heap laid up on the 19th of April and opened this afternoon, (May 3d, 1843,) they most cheerfully acknowledge that the change produced upon the materials used, far exceeded their most sanguine expectations; said materials, consisting of straw and salt hay, presented, when opened, the appearance and smell of rich manure.

Said committee further report that they also examined the book containing Mr. B.'s method, and are fully persuaded that the various ingredients used, are all, in themselves, beneficial, and in their combination must produce the most favorable results. The committee most cordially commend the above method to the serious consideration of the farmers of Long Island.

By order of the Committee.

ELIAS HUBBARD, *Chairman.*

Flatlands, May 3, 1843.

The above is taken from the "Long Island Star," and goes far to corroborate Mr. BOMMER'S claim to the discovery of a valuable agricultural invention. Since the publication of our last number, we have received so many applications and inquiries relative to the merits of this process, that we wrote to Mr. Bommer, advising him to authorize us to place the method in the hands of some individuals whom we would select here at home, known to us, and known to the public, for their integrity and judgment, and

upon their certificates of its merits to sell his rights, without any farther guarantee or warranty. To this application Mr. Bommer promptly responded, authorizing us to take any steps we chose to test the merits of his invention, in which it is certain he entertains the most unbounded confidence. Accordingly, we have been making the necessary arrangements, and hope, as soon as the nature of the thing will permit, to furnish our readers with satisfactory information upon the subject.

In the meantime, we see from the last number of the American Farmer, that Mr. Bommer's claim to the title of *discoverer* is disputed by another French gentleman, who claims to have been the first to introduce the process into this country. The public, probably, are much less interested in settling the honor of discovery, than the merit of the invention. We copy the article as we find it in the "Farmer." If we understand it correctly, Bommer's right to sell is not disputed, but an equal claim is set up by other parties, which is totally denied by Mr. Bommer: so that the purchaser from the one is upon sure ground, whilst the other may be much harassed if Mr. Bommer succeeds in establishing his exclusive claim. The Editor's testimony as to the result of the operation, as far as appearances go, is very satisfactory.

"GOULIART'S MODE OF MAKING MANURE.—We rode out to Mr. *David Carlisle's*, in Baltimore county, on Saturday last, to view a pile of manure put up by Mr. Gouliart, for that gentleman, upon what is called the *Bommer* plan. Of the claim of the latter gentleman to the invention there is at present a doubt, but as we are not called upon to decide the claim to invention, all we will say at the present time, upon that head, is, that a French gentleman by the name of *Bear*, appears to us, from what we have heard, to be the first one who introduced it into America, and that he and his partner, Mr. *Gouliart*, have made improvements in the mode of preparation. Now for our opinion as to the value of their plan. The pile at Mr. Carlisle's was put up on the 1st of March, when the *materials were much covered with the ice and snow; and, of course, in a very bad condition to be operated upon. They consisted of unbroken corn stalks, leaves from the woods, coarse marsh grass, and the harsh rubbish usually found on a farm.* And notwithstanding the unsuitable condition in which those materials were at the time the pile was made, the uncongenial state of the weather nearly ever since, and the unavoidable neglect by Mr. C. as to the regular application of the decomposing liquid, we found a mass of most excellent manure, which was for the most part of *black, unctious, and of fertilizing appearance*, and we hesitate not in saying, that we have not the slightes doubt as to the intrinsic value of Messrs. *Bear & Gouliart's* method of *rapidly* converting all ligneous and woody substances into good fertilizing manure, and that their plan will be worth millions to the agricultural community of America. We will refer to this subject again, probably in our next."

TO CORRESPONDENTS.

We are obliged to Mr. BEMENT for his communication on the culture of roots, received too late for this number. We are doubly indebted to this gentleman for any communication from his pen, because, with a liberality unparalleled, he affords his valued assistance to our columns, whilst he is engaged in editing a paper of his own. It may not be known to our readers that the "Central New York Farmer," a paper at all times worthy of their especial patronage, has placed its claims to public favor on the highest grounds, by securing the services of Mr. Bement as assistant Editor. A single article from his pen would at any time be valued, in the editorial market, at ten times the price of the paper, which is only fifty cents per annum.

Articles from "A Young Farmer;" from S. D. M. on the improvement of old land; from J. Duval on the division of arable land; from W. O. G.; and several others, received too late for this number, will appear in the next.

POSTAGE.

Of all the ridiculous laws that disgrace the statute book, the postage law of Congress, as construed by the Postmaster General, is the most absurd. Our paper, without a cover, was declared by the Postmaster to be, *from the nature of its contents*, an agricultural *newspaper*, and like the "Cultivator," it was subjected to newspaper postage, the maximum of which is 1½

cents. But as soon as it was stitched and covered, the nature of its contents remaining the same, mark ye, the Postmaster decides, and no doubt properly under the law, that it is a *pamphlet*, and as such, subject to pamphlet instead of newspaper postage.

The cover "if used for general advertising purposes" is charged as another sheet. When we became aware of this fact, to save a portion of this unjust burden to our subscribers, we discontinued our general advertising business, although a small source of profit to us, and used the cover only for our *private* purposes; then the postage was, under our construction, marked "1½ cents under a hundred miles, and 2½ cents over a hundred miles." But having received orders that the number was wrongly marked, and that it should pay 2½ and 5 cents, we of course made the alteration required, and have, in consequence, opened again our columns to our advertising friends.

The effect of this regulation is, that the paper published at one dollar is taxed to distant subscribers with a postage of sixty cents, or more than half the subscription price: whilst the large periodicals of the North, as the "New World," &c., three times our size, and burdening the mails three times as much, because they are not pricked by a needle, pay about one-fourth the postage. What a ridiculous and impolitic distinction! Works of a substantial and permanent character, which the government should rather encourage than depress, are precisely those which are most likely to be furnished in that form, which subjects them to this ridiculous tax.

Many of our subscribers object to the disproportion between the subscription and the postage, and we are so often the sufferers by this absurd regulation, that, in self-defence, we shall probably be compelled, another year, to forego our neat and convenient form, and issue our publication in the style required by the capricious whim of our Congressional representatives.

EDITORIAL DEPARTMENT.

In consequence of an intended change of residence, Col. Burfoot has disposed of his interest in the PLANTER to the subscriber, who is now sole Editor and Proprietor of the paper. By this arrangement, the subscribers to the paper will sustain no loss, for whatever it has heretofore been, it will be likely to continue; it having so happened, that from the hour of his connection with it until the present moment, the junior Editor has never written a word for the paper, or even seen a sheet of it until it was in the hands of subscribers. Indeed, we entertain a strong hope that the Colonel may be induced to do more for "love than money," and now that the irksomeness of duty is removed, we expect to receive from his pen those contributions that he is so able to afford.

C. T. BOTTS.

ERRATUM.—For now, *nostrum tantas*, &c., in the last line but two of the 134th page, read, *non nostrum tantas componere lites*.

CONTENTS OF NO. VI.

Breeding—Rules to be observed in breeding animals, p. 121.
Eyes—Treatment of inflamed eyes, p. 122.
Blue Grass—Its cultivation urged by a correspondent, p. 123.
Agriculture—Its dignity and importance, p. 123.
Poultry—Deserves more attention, p. 124.
Post and Rail Fence—Machine for mortising described with a cut, p. 125.
Corn—Novel mode of cultivation, p. 126.
Comments—On the March and April numbers, p. 126.
Premiums—Proper mode of awarding, p. 128.
Points—Desirable in horned cattle, p. 128.
Agricultural Club—One established at Wilmington, Delaware, on the Virginia plan, p. 128.
Herdsgrass—Recommended in preference to clover, p. 129.
Pasturage—Artificial grasses and the extensive keeping of stock recommended, p. 129.
Asparagus—How and when to cut it, p. 131.
Butter—Its manufacture and preservation, p. 131.
Gate and Fixtures—Described, with a cut, p. 132.
Comparison—Of the nutritive properties of different crops, p. 133.
Soot—Its value as a manure, p. 133.
Salt—Its effect upon worms, 134—used to retain ammonia, p. 135.
Culture—Its effects, p. 134.
Ammonia—Different modes of retaining, p. 134.
Cream—Substitute for, p. 135.
Duke of Northumberland—Notice of, p. 136.
Ploughing—Directions for, p. 136.
Smart Weed—Its effect on chinches and fleas, p. 136.
Secret—For making a crop without manure and without cultivation, p. 136.
Health—To preserve, p. 136.
Worms in Children—To cure, p. 138.
Recipes—For dyeing and painting, p. 138.
Aphorisms—No. 2, p. 137.
Stones—Should not be removed, p. 137.
Sweet Potatoes—Mr. Gordon's mode of cultivating, p. 137.
Jumping Coulter—Described, with a cut, p. 139.
Vegetable Supporters—No. 2, p. 140.
Sturgeon—To pickle, p. 141.
Buckwheat—To cultivate, p. 142.
Bommer's Manure—Additional particulars, p. 142.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS, Editor.

VOL. III. RICHMOND, JULY, 1843. No. 7.

For the Southern Planter.

ROOT CULTURE.

Mr. Editor,—The flattering reception which my communications on the culture of Rutabagas and White Belgian Carrot, have met with in the "Southern Planter," emboldens me to try my hand again. I have not the vanity to suppose that I can enlighten the readers of your paper, but if I can even be the means of directing to this subject the attention of some of the planters, who are skeptical of the value of root crops, in comparison with Indian corn, and induce them to make a fair trial, I feel convinced they will throw aside their prejudice and adopt their culture hereafter, to a certain extent. I would not wish to be understood as recommending the cultivation of roots in preference to corn, but an acre or two in roots will add much in the economy of feeding stock; enabling the planter to keep more and keep it in much better condition too; and the more stock, the more manure, and the more manure, the greater the crops.

Prejudice and conceit are the offspring of ignorance, and the great barrier to agricultural improvement. The first requisite to improvement, in any business, is the conviction, that we *can* learn; the next, that we *will* learn. And it perhaps is invariably true, that the more we *do* learn, in useful knowledge, the more we become sensible of our comparative ignorance, and the more we are anxious to learn. This results not only from a wish to serve ourselves, and multiply our enjoyments, but from a sense of sacred duty to society.

I am aware that it is generally supposed, at the South, that the same labor and the same expense, will obtain more nutriment from an acre of corn, than from an acre of any root crop whatever. But such is not the case, here at the North. From our soil, that will yield forty bushels corn to the acre, we can get from four to five hundred bushels of rutabagas, and from three hundred and fifty to four hundred of carrots, or mangold wurtzel, which, for milch cows and young stock, we consider of great value. They have not the fattening qualities, but are considered to exceed all kinds of grain in growing flesh. One advantage the root culture has over corn is, that it does not exhaust the soil so much, as it draws a great proportion of its food from the atmosphere; besides, rutabagas can be sown after the other seeds, and harvested after all the other crops are secured, and no growth leaves the soil in better order for a succeeding crop.

The introduction of the root culture into Britain forms one of the most important eras in the improvement of British husbandry; and its introduction into our country will ultimately prove highly beneficial. And that they can be grown south, and in Virginia too, is evident from the following, which was published in an early volume of the "Albany Cultivator." Mr. W. S. Morton, of Prince Edward, in a letter to the Editor, says, "That our soils are well adapted to the culture of the rutabaga I have demonstrated, to my own satisfaction, by a successful trial, on a moderate scale, for a number of years. I have cultivated mangold wurtzel last year on about the fourth of an acre, and succeeded to the astonishment of all who saw the crop."

If the root culture can be made to succeed in Virginia, of which I have but little doubt, I should not at all be surprised to hear that the lands there should double in value in the course of a very few years. In fact, I am so well convinced of it, that were I to sell the farm I now occupy, I should turn my face to Virginia, and take a *look* at some of the now considered worn out lands before I settled down again.

And now, my good natured readers, permit me to recommend, in the culture of either variety of roots, the *ridge system*, which I have adopted, and given in the first number and fifth page of the current volume of this journal. In this plan the labor and tediousness in the first working is much abridged, and can be done by the younger or aged hands, and after a little practice, becomes less irksome, and not such a tedious job after all. Try it, and let us hear of your success through the columns of this paper.

C. N. BEMENT.

Three Hills Farm, May 18, 1843.

For the Southern Planter.

IMPROVEMENT OF OLD LAND.

Mr. Editor,—The improvement of lands, especially such as have long been abandoned as worthless, I am persuaded from some experience, is practical. Old fields used for many years as commons, require only one good manuring to

produce good tobacco. After the tobacco crop, (which is the best preparation) seed in wheat, and, in the month of February, in clover and herdsgrass.

I have a lot of wheat at this time on such land, that promises a better crop than other lands often manured, and to all appearance much richer, (no doubt wearied by much cultivation.) When well set in grass, it should not be interrupted with the plough for two or three years.

My plantation is one of the oldest in Charlotte, and was first settled by my grandfather, who was a woodsman, and took up the lands generally in my neighborhood, as may be seen by reference to the patents bearing date about the year 1756.

The up-lands were so much exhausted from hard cultivation when I got possession, as to make it absolutely necessary to improve the cleared land, or cut down the remaining forest, which was not more than sufficient for fire wood and fencing. I had often heard the remark from a very practical man, that it was as easy to improve as clear an acre, and I resolved to try the experiment. I am satisfied that an acre can be covered and improved, even if under the necessity of hauling richer earth from hedges, corners of fences, ditch banks, sooner than we can cut down, grub, and prepare timbered land for a crop of any thing.

It is my uniform practice to make my farm-pens on the ground I wish to improve, selecting the poorest spot, especially if it is dry; it will be sufficiently enriched by the juices from the litter lying through the winter. It will save much hauling from a more permanent shelter, often distant from the land to be improved.

To restore our old lands, we must be patient and persevering, adding to the quantum of lot land every year as much as convenient; the progress, though slow, will tell in a few years.

The consolation of having bettered the condition of our lands (to say nothing of the profit from better crops) is sufficient to arouse the energy of Virginians. We have a soil and climate adapted to the production of every crop essential to the wants of man, and we have only to avail ourselves of the cheapest and most practical mode of improvement to change the present gloomy prospect, which now hangs over us, to substitute a verdant scene, in place of the cheerless broomsedge which meets the eye of the way-worn traveller from better cultivated countries.

Farm-pen and stable manures for our tobacco country are the cheapest and most certain improvers, after all; plaster, lime, &c. are rather expensive articles to be used broadcast.

From the flat lands the cornstalks should be taken, affording a very good feed for cattle in the fall, and the best foundation for the farm-pens and stable-yards, with as many leaves as can be conveniently hauled. The straw should then be fed by scattering it generally over the pen, unless so abundant as to be spared and carried directly to the land to be improved.

I knew a planter in my county who manured mainly with leaves, and a most successful planter he was, (the Rev. James Brooks,) covering his tobacco lots very deep, with leaves only. I would suggest alternately a pile of manure and leaves; by this means a larger surface may be aided. The great object is to manure enough to make the clover and herdsgrass take; this effected, much is accomplished—at least our barren lands may be converted into good pasture.

With much respect, yours, &c.

SAMUEL D. MORTON.

N. B.—I have been engaged in improving waste land about ten years. Probably I may not have made as fine crops as those who apply the whole manure to better lands, but I have been profited by enhancing the value of my land. Such as I have improved would not have been estimated by any judge of land at more than three to four dollars, now it may be safely valued at from six to eight dollars.

S. D. M.

May 10, 1843.

For the Southern Planter.

COAL-TAR.

Mr. Editor,—In your March number, inquiries are made in relation to coal-tar. Being in Richmond when it issued, I wrote a few lines in answer to the inquiries referred to, but concluded not to deliver them to you, but to wait until I had an opportunity of re-examining the roof upon which I had used it, some four years ago. Two weeks ago, I chanced to be at my former residence, and another gentleman and myself examined the roof. The gentleman that was with me was an experienced carpenter.—We cut into the shingles; the tar had not penetrated, but formed a thin covering, and the shingles were full of the fine fuzz, used by wasps and hornets to build their nests. We were both of the opinion that it was very little, if any benefit to the shingle, and far less beneficial than common paint. It makes, at best, a very ordinary coloring, soon fades and looks dingy and mean.

The excellence of coal-tar, in my opinion, lies in its far excelling, in odor, the best specimens of dead cattle, which, through the length and breadth of our good old Commonwealth, every spring delight the nostrils of those airy epicureans, the buzzards. Unlike the short-lived hyacinth which puts forth to-day and to-morrow withers, it keeps up the game for weeks, until the poor mortal who has been ingenuous enough to buy and use it, can smell nothing but coal-tar,

thinks of nothing else whilst waking or sleeping, dreams of coal-tar, and rouses himself, holding his nose. Those who think they would like to sleep with a dead hog for a month or so in summer, will do well to put coal-tar upon their roofs, otherwise, not.

PHILIP A. BOLLING.

For the Southern Planter.

DIVISION OF ARABLE LAND—ROTATION OF CROPS—EXTIRPATION OF SASSAFRAS, &c.

Mr. Editor,—Brevity shall be observed in filling up the heads above laid down; and under the first, I will endeavor to answer this question, *What is the best division of arable land, compatible with its steady improvement?* Profit is what we aim at in all our exertions in agriculture; first, in the amount and value of the products drawn from the soil, and secondly, in the permanent improvement of our fields. If we make large crops at the expense of our lands, it becomes every year more certain that our apparent gain is real loss. We should aim then to get good returns, while we make permanent and as rapid improvement as practicable. For the purpose before me, I will suppose a farm of four hundread acres of arable land, to be divided into *six parts*; two of these, to contain one hundred acres, each, the other four, fifty acres each. The two should be so arranged, if practicable, as to be contiguous to the farm houses. This ratio in the division, is founded on the amount of stock *actually* needed on the farm. If summer support can be had from natural meadows or marshes, then, the four lots should be still further reduced, and the two, proportionably enlarged. The design of the plan, is to get the greatest gain—support only the stock actually necessary—extend our means for giving employment to our increasing hands, and to enrich the land. All this, the writer is confident may be done upon this plan, *with a good rotation of crops*. This is the *second* point to be considered. On the two "*hundred acre*" fields, let the rotation be corn, wheat or oats, or part of each, according to soil and comparative value. At first, no grazing should be allowed on these lots, say, for two years; afterwards, especially if laid down in clover, (which will on good land attain to good size during the fall after the small grain is taken off,) a very good bite may be extended to the stock just before going into winter quarters.—*Without a particle of manure*, the land will, under this plan, grow better every year. But the increased product of the large field, over the small one, places it in the power of the proprietor to apply much more manure over the whole aggregate surface, than upon other plans. Reflection will convince the reader of this, and save the time and space of an argument here.

The rotation for the fifty acre lots, should be *corn*, *wheat*, *clover*, *pasture*. The whole farm then, will have on it when the plan is in full operation, one hundred and fifty acres in corn—the same amount in small grain—fifty acres in clover, which should be neither *cut nor grazed*, unless the land can fully justify it—and fifty acres in *close pasturage*, by which it will have its last year's clover well trampled in, and the present crop nicely cleaned off for corn the next year. We thus get larger crops, more manure, and greater profits. Corn is our great staple in this region—it cannot be dispensed with. Wheat is most precarious. Upon other systems, we have a sixth, a fifth, a fourth or a third of the four hundred acres in corn. This gives us sixty-six and two-thirds acres—eighty—one hundred—and one hundred and thirty-three and one-third acres in corn; while the proposed plan gives one hundred and fifty acres. Suppose the experiment to begin on land yielding four barrels per acre; look at the result. Two hundred and sixty-six—three hundred and twenty—four hundred—five hundred and thirty-three—and six hundred. Now count this at three dollars per barrel. See how rapidly, comparatively viewed, the capital is turned over. When fairly considered, it appears to the writer that it is impossible to raise a substantial objection to the *practical operation* of the plan. It entirely exceeds the old *three field* system in every point of view, and yielding a greater amount of offal, its resources are proportionably superior to all the other systems that I have examined. The plan may frequently be so arranged as to save much fencing; no dividing fence being needed between the two large fields, on many farms, the grazing allowed, being made the care of a driver. But I meant to be short.

A word on the sassafras and other pests. I have found the best effects, nay, the only efficient effects, from *grubbing every summer*. As soon as corn is laid by, grub the pasture and wheat field. The cultivation of corn will keep it under one year in each rotation. So that the blue thistle, running brier or any other pest, for *six* years in succession, and the farmer will be so fully convinced of his ability to extirpate, that he will have but little more fear of them. I have tried it.

The foregoing matters are respectfully submitted to the farmers of lower Virginia particularly, by

J. DU VAL.

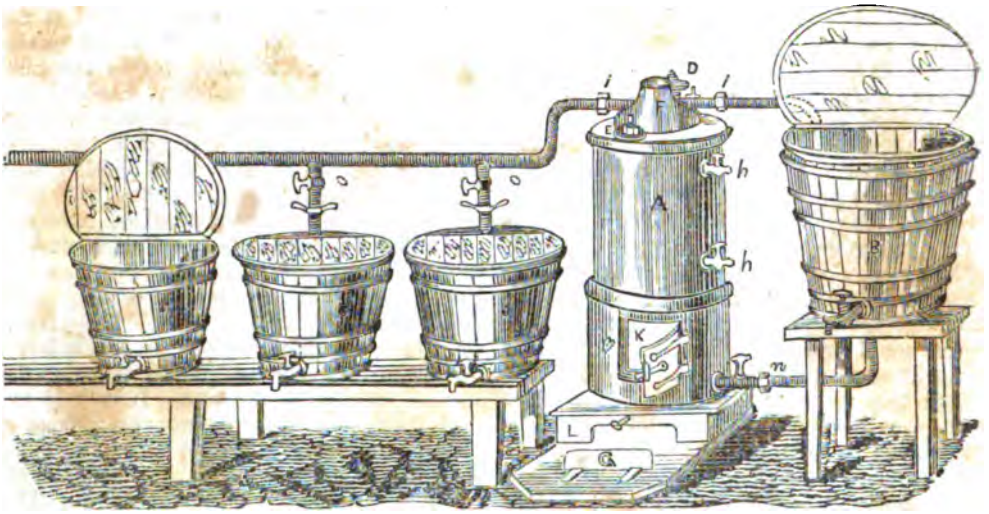
King & Queen County.

PRESERVING SCYTHES, &c. FROM RUST.

To preserve scythes, sickles, reaping hooks, and other steel tools from rust after the season for using them, wipe them clean and dry, and,

hold them before the fire and keep drawing them backwards and forwards until warm enough to melt wax; then take some beeswax and rub it all over. A half-penny worth of wax will be sufficient for a scythe. Then put it in a dry place, but not warm; it needs no other covering. The usual method is to wrap a hay-band round; but in winter time this naturally contracts moisture, or the damp air strikes in betwixt the folds of the hay-band.—*Farmers' Magazine.*

BENTLEY'S STEAM GENERATOR.



Since the practice of cooking food for stock has become general, which it has at the North at least, many plans have been devised to effect this object in an economical manner. Saving of fuel has become a matter of importance, even to our prodigal friends of the South; and when wood continues to be so abundant as to be little regarded, the labor of cutting and hauling is so onerous, as to have brought into repute several stoves and boilers for cooking and steaming.—Of all the different kinds of apparatus which we have ever seen for heating water, in point of convenience and economy, we greatly prefer the one illustrated in the engraving. The principle is neither more nor less than that on which the well known locomotive boiler is constructed.—This plan has been long known as the most economical that could be adopted, but the cost of construction has hitherto prevented its use, except for certain kinds of steam engines. We are indebted to the ingenuity of Mr. Bentley for the invention of labor-saving machinery, whereby the cost of this article is so reduced, as to bring it within the range of private uses.—Wherever any quantity of heated water is required, whether in the kitchen or on the farm, for washing or for cooking food for stock, we have no hesitation in expressing the opinion that it is the most perfect apparatus in use.

A is the boiler, which is filled by unscrewing the stopper at E. K is the furnace, in which the fuel is deposited. The bottom and the top of the boiler A are perforated with holes, varying in number from 19 to 30, 1¼ inches in diameter, and hollow tubes of wrought iron extend from the top to the bottom, having their ends secured in these holes: so that the only egress for the heat and smoke of the furnace, is through these tubes: consequently, the heat of the fire, instead of extending around the outer surface of the water only, as in other arrangements, is here driven through the body of the water in nineteen different pipes. These pipes are all covered by the lid F, to the top of which a common stove pipe is affixed. This lid can be raised up, or taken off, at pleasure, for the purpose of cleaning the pipes from the soot, &c. which accumulates within. D is a

weight of seven or eight pounds, which acts the purpose of a safety valve, and is found amply sufficient to retain the steam for all purposes, whilst it prevents the possibility of explosion.—*i*, *i*, are couplings, by which pipes may be connected with the steamer, leading off into such reservoirs as may be required: just behind the one on the right hand side, is seen a stopcock, (there is a similar one on the opposite side, concealed by the weight of the safety valve) the turning of which turns the steam off or on at pleasure. *h*, *h*, are cocks, by which the height of the water in the boiler may be ascertained: it should not be filled above the upper one, nor suffered to get much below the lower one. *o*, *o*, are branch pipes, of which there may be as many as are required, furnished also with stop cocks leading into vessels as may be wanted.

Let us suppose the boiler filled with water, and a fire kindled in the furnace, a large double handful of wood or coal being sufficient for the purpose: as soon as steam is gotten up, which will be in about twenty minutes, the vessels are filled with water, and the stop cocks in the pipes are opened; immediately the water is raised to the boiling point, and as much above it, as you may please, by keeping down the lid: it may of course be then applied to any purposes for which boiling water is used. By means too of the cock just above the vessel, the heat may be raised or lowered at pleasure. These vessels are generally wooden tubs furnished with cocks at the bottom through which the water may be drawn off, if it is desired, for other purposes.

Sometimes, upon the other side of the boiler, a large tub or reservoir (B) is used, which is represented with its lid up: into this reservoir one of the pipes of the boiler is introduced, through the top, by which any quantity of steam may be injected into it. Of course, if this reservoir is kept filled with water, the water will be kept hot, which, drawn off through the cock at the bottom, will afford a constant supply of hot water for household purposes. Also, if a pipe be carried from the bottom of this reservoir to the bottom of the boiler, which it must be remembered is hollow and surrounds the furnace, to supply the boiler with water, all that we have to do, is to open the cock at (*n*), and let the water flow in from the reservoir, which it will do, until it rises to its level in the boiler. In this case the stopper at E is not used. Of course, whenever the boiler is to be filled, the steam must first be blown off.

Some contrariety of opinion exists as to the relative merits of boiling or steaming food. This apparatus is equally adapted to either mode of cooking—a barrel may be filled with potatoes, and one of these pipes being introduced through the head or lid, they will be thoroughly steamed in twenty minutes; or if the barrel is filled with water, they may be boiled in almost as short a time. A representation of the various purposes to which it is adapted, give this apparatus an air of complication, which does not belong to it: to us it appears perfectly simple, and within the comprehension and management of the meanest capacity. So assured is the inventor of its superiority, in point of economy, that he is now erecting several in this city upon the understanding, that he is to be paid only when the purchaser is satisfied that it saves two-thirds of the fuel consumed by any other apparatus in use.

There are three sizes, which are furnished at $55, $70 and $85, delivered in Baltimore, where they are constructed. These prices are for the boiler and furnace alone: the pipes and vessels, which vary with the different establishments to which they are furnished, are either made by the purchaser himself, or charged for separately.

For the Southern Planter.

IMPROVEMENT.

Mr. Editor,—In looking over your truly valuable paper I do not see any plan advised for the improvement of land, which, in my opinion, is so effectual as the one I pursue.

I live in what may be called the red land district of Amherst. The character of the soil is similar to that of Albemarle; the clay is very red, and tenacious, so much so, that it is difficult to plough it until it is mixed with vegetable matter

My plantation is laid off in five fields, so as to fallow clover for wheat and for corn. The oat crop follows corn, and it is upon this crop that I use most of my manure and straw to procure a good stand of clover. The clover seed are raked in with the oats and the thinnest land is liberally top-dressed with long or unfermented manure, which nourishes the young clover, and protects it from the hot sun, thereby insuring a good stand. The oats or clover are plastered about the first of May, about half bushel to the acre, and as much more the ensuing spring, which should be applied by the first of April.

It is astonishing to see what effect a good

clover lay turned in has on our soil, changing it from a red to chocolate. What manure I have in the fall I apply to the poor spots, raking it in with the wheat. If put upon the wheat in the winter, as is the custom in the more eastern counties, it will be sure to give it the rust, though it will produce a heavier crop of straw.

A YOUNG FARMER.

Amherst, March 25, 1843.

TRANSACTIONS OF THE NEW YORK AGRICULTURAL SOCIETY.

We are indebted to the politeness of Mr. Luther Tucker, the Secretary, for the second volume of the Transactions of the New York State Agricultural Society. As in the last volume, so in this, we meet with matter of great ability and of general and absorbing interest.—Amongst other things, we find two prize essays, from the pen of Willis Gaylord, Esq., occupying sixty pages, every word of which we should be glad to transfer to our columns, if the nature of our work permitted. As it is, we must be content with making brief extracts from such portions of these essays as we deem most interesting to our readers. The first essay is on

THE PREPARATION AND USE OF MANURES.

After examining the nature and constitution of plants, Mr. Gaylord remarks, "In the preparation of manures, the principal object to be aimed at must be to supply materials for the formation of carbon and ammonia; and these are found in the greatest abundance in dead or decomposed animal and vegetable matter." He then proceeds to consider separately the different kinds of manures, under appropriate heads, and first of

ANIMAL MANURES.

He quotes a late British writer on agriculture, who says, "If cattle repay their food and the expense and risk attending their keep, the manure is sufficient profit. Even with a moderate loss, they must be kept when manure cannot be purchased. Manure is to a farm what daily food is to an animal; it must be procured at any sacrifice." Mr. Gaylord thinks, that to such crops as corn, potatoes, &c. that do not require forcing in the early part of their growth, but demand nutriment at a late period of their vegetation, to perfect their seeds or roots, long manure may well be applied in the spring; being well covered, fermentation will not take place, until the gases, which are eliminated in that process, will be retained by the earthy covering, and appropriated by the roots of the plants. To preserve manure for such purposes, he thinks, that the usual plan of incorporating the droppings of the cattle with the usual litter of the farm-yard, during the winter months when the absence of heat prevents decomposition, is fully sufficient; but for other crops, as turnips, beets and carrots, where the influence of manure is required to be felt at once, in order to push them forward at the first start beyond the reach of insects, he thinks the vegetable matter should be reduced to a state of perfect decomposition, before its application. Whenever this process takes place, the vegetable matter should be protected and covered, as in the compost heap, with alternate layers of sod, earth from ditches, ponds, &c. which may absorb the drainings of the manure above, and arrest the ascent of the gases from the manure below. He says, "the more solid such deposites of manure are made, the more slow will the fermentation be. Should the dung in these heaps be too slow in fermentation, it may be hastened by opening the piles, or still better, by making holes in the top into which the wash of the yards and the urine of the stable may be poured."

If Mr. Gaylord is correct in supposing that no loss occurs during the winter months in the farm-yard manure, his plan of hauling it out and covering it up at that season when the heat generates decomposition, is highly to be recommended; because it saves all the labor of the compost heap during the winter season. But, in our southern climate, at least, we imagine that the loss, even during the winter, from evaporation and solution, would more than justify the labor of daily collection and addition to the compost heap. In addition to the earth and sods, which are mere mechanical retainers, we do not doubt that valuable chemical agents, as gypsum, salt, &c. may be added, whereby desirable combinations with the gases, &c. liberated in the process of decomposition, may be obtained. Upon this portion of the subject the science of chemistry is one day destined to shed most valuable light.

Upon the subject of

GREEN CROPS

Mr. Gaylord remarks, "For a plant to enrich exhausted soils, affording as it does both top

and roots to a large extent, there is no plant equal to *clover*; and particularly where it is necessary or desirable to have the green crop fed off by animals. I prefer letting the clover grow until nearly or quite in blossom, and then turning sheep upon it. They will eat much of it and fatten rapidly; but they will trample down more, and this, mixed with their dung, forms in its decay a most efficient top dressing; and repeated for two or three years, forms an admirable preparation of the soil for wheat or other grains. When a crop is cultivated to be ploughed in, it should be done at the time when the plants contain the greatest quantity of nutritive matter, and have least exhausted the soil in which they are growing. This, in most cases, will be when the plants have come fully into flower. At an earlier period there may be as much weight, but a larger portion of it will be mere water; and, if allowed to stand much later, the soluble matter is lost in the seed, and the ligneous part of the stem becomes more difficult of decomposition. Buckwheat is a good plant for a green manure; its growth is rapid, and gives a great weight per acre, and two crops may be ploughed under in a year. The best way of ploughing in such green crops, is to pass a heavy roller over them, which lays the plants close to the ground, and greatly facilitates covering them by the plough. It is believed that corn, sown broadcast, and when just showing its tassels, cut and covered by the plough, would be one of the best crops that could be chosen for this purpose. A man or boy, in this case, would be required to follow the plough, to place the corn in the furrow for covering, at the next passage of the plough.—Taken at this time, corn abounds in nutritive matter, and could scarcely fail of proving a first rate fertilizer of the soil."

Mr. Gaylord thinks that wherever other vegetable matter can be had, fallen LEAVES will not pay the expense of gathering.

PEAT, SWAMP AND POND MUD

he esteems very highly, but these substances applied in their natural state are almost inoperative, as compared with stable manure. To enable it to give out the ammonia, with which it abounds, peat or swamp muck must be fermented, and it is for want of this process that it is so little esteemed, in general. To bring it to this state, we are recommended to compost it with half its bulk of stable dung, which it is asserted will form a heap equal in fertilizing properties to three times the quantity of dung employed.

Poudrette, urate, guano and other peculiar manures are brought under our notice in order, but passing over these we come to the more general one of

LIME.

Upon this subject our author remarks, "It appears as the result of experience, that lime produces the best effect on what are called stiff loams, or loams inclining to clay, and in which a good proportion of decayed organic matter is found.

"It is found, too, that it operates more favorably on soils natural to oak and its kindred trees, such as walnut, poplar, &c. than on those where the beech, elm and maple constitute the principle timber. It is singular that the richest limestone lands, as they are called from being based on this rock, are frequently those on which heavy dressings of lime operate like a charm.

"If used as a top dressing, lime is usually applied to the sod in the fall; but the practice most approved, is to lime the corn ground in the spring, on the inverted sod. Manure is applied to the wheat crop after lime. The quantity of lime used varies much. There is no doubt it has sometimes been used in excessive quantities; and when used on soils nearly destitute of vegetable matter, can produce no good effect. On a medium soil, fifty bushels per acre may be considered an abundant dressing; but three or four times that quantity is sometimes used. The best method of using lime, is to take it from the kiln, unslacked, and deposit it in heaps in the field where it is to be used, not more than three or four bushels in a place; and either slack it by pouring water over it, or, which is better, by covering each pile with earth, and letting them slack by the moisture thus furnished. When sufficiently fine, the earth and the lime are mixed by shovelling over, and the mass is then scattered over the land to be dressed. The soil should be well harrowed after the application, to incorporate it more completely with the surface earth."

SALT

is very highly recommended. "It appears that salt in small proportions, promotes the decomposition of animal and vegetable substances; that it destroys vermin and kills weeds; that it is a direct constituent of some plants, and therefore

necessary to their perfection; that all cultivated plants of marine origin contain it, asparagus, for instance; and that all such succeed better when watered with salt water, than when deprived of it; that salt preserves vegetables from injury by sudden transitions in temperature, salted soils not freezing as readily as those to which salt has not been applied; and that it renders the earth more capable of absorbing the moisture of the atmosphere. When salt is applied as a manure, it may be used in quantities from six to fifteen bushels per acre; although some have gone as high as fifty bushels. Farmers, however, should be cautious how they venture on excessive doses, as an extravagant one could scarcely fail of being fatal to any crop.

"Salt and lime, artificially mixed as a manure, promises to be a valuable aid to the farmer in those positions where the soil abounds with insoluble silicates or geine, and where other manures necessary to produce decomposition or fermentation are not at hand. Professor Johnston recommends a mixture of two parts of lime and one part of salt, the mixture to remain incorporated in a shady place, or covered with sods two or three months before using. Salt and lime should not be used immediately after mixing, as bad results are apt to ensue; but after being well mixed in a dry state and lying as directed, it may be applied at the rate of from thirty to sixty bushels per acre, either before or at the time of sowing.

"Dr. Dana directs to take one bushel of salt and two bushels of lime; to make the salt into strong brine, and with it slack the lime. Mix both well together, and let them remain ten days; then let them be well mixed with three cords of peat, shoveled well over for about six weeks, when it may be used. A quantity of salt sufficient to destroy all vegetation, may be applied to a soil with safety when a few months are to elapse before the crop is to be put on; as the chemical changes which take place, partially neutralize its effect during this time. A small quantity mixed with the soil in each hill of corn, has been found to protect it from the wire worm and the cut worm; indeed there is no substance that insects of all kinds more dread than salt. It is probable, therefore, that further experiments will show that not the least value of salt is to be found in its preventive properties against these depredators. Mixed with soot, salt acts with great power on roots."

We know how objectionable long articles are in the general, and have endeavored to compress the *gist* of this valuable essay into a few pages. The subject is in its nature extensive, and we fear we have done injustice to Mr. Gaylord in our abridgement. Indeed, properly considered, the essay, long as it is, is nothing but a series of condensed remarks upon a variety of subjects, all coming under the general head of "manures."

For the Southern Planter.

SWEET POTATO.—BLUE GRASS.

Mr. Editor,—After reading your account of Mr. Gordon's mode of cultivating the sweet potato, I came to the conclusion that it was my duty, in return for the information I had obtained from your numerous contributors, to send my mite to you. I have been successful in *keeping* the sweet potato, and I know of several others, whose success has been greater than my own, by pursuing the same method.

The great danger is, from the confinement of the moisture which arises from the potato after it is dug. Indeed, for some weeks after they are housed, the "sweating," as it is called, is very great; and is always more or less, as the season has been wet or dry before they were dug. This moisture must be allowed to escape; and if it does not go off spontaneously, artificial means must be used to expel it. The best way is to have the house or cellar kept open for some weeks until this evaporation ceases—and gradually to diminish the ventilation until the potato has been well cured, or ceases to sweat.—They will become moist frequently in the winter, spring and summer, in which case, they must be smoked—that is to say, a parcel of coals must be put in a dutch oven, or something of that kind, with some small pieces of wood (chips are used by us) and this placed in the cellar or house where it should remain until the fire goes out, shutting the door close. You will find the moisture is soon expelled, and the potatoes are dry. It would be best to have this done every day or two, as long as they last—certainly, every day when the weather is moist or cold. These two cardinal objects should never be lost sight of—to keep them dry, and moderately warm.—An excess of moisture, or cold will certainly destroy them: the smoke and fire will be found to be adequate to these ends—if attended to every day they need it.

My friend, Col. William R. Baskervill, of Mecklenburg, keeps them in large quantities, for family use, for years. I have eaten potatoes at his house, I think, fully two years old. I believe that he has had old ones on hand when the new crop was housed, for many years past.

This plan was introduced by an old man in Mecklenburg, some thirty or forty years ago, who never failed to keep his potatoes; and it has been slowly adopted in that neighborhood, until it has been established by the invariable success of the practice.

The old fashioned potato cellar is preferred, dug under a house which does not leak, and where fire is usually kept—but the plan will as well apply to any other place—houses built expressly for that purpose, no doubt, would succeed just as well; but fire and smoke must then be more abundantly and oftener applied. Where the bulk of the potatoes is large, it would be well to have small places in the bulk so arranged that the moisture could escape from them—for instance, if several hundred bushels were together, stakes should be driven down in a circular form, in two or three places in the thickest part of the bulk, so as to secure an open space or funnel for the moisture to escape; and in each of these funnels it would be well to introduce a few coals and chips, when needed.

The sum total of the whole secret is, to keep them dry, and to keep them moderately warm; and this being done, they can be preserved until they can be disposed of as the owner may desire.

Whilst I am writing perhaps I can give Mr. Scales a hint in relation to the blue grass. In this part of the State, it is difficult to get "*a stand*" of blue grass from the seed. The hot and dry summers, if the seeds shall germinate, usually destroys the little delicate plants. I have a yard of about two acres, for the most part shaded by oak trees, on the summit of a ridge which separates the waters of two creeks, and I found it very difficult to get any grass to grow on it, particularly under the oaks. The idea occurred to me to *transplant* the grass, by sticking a very small bunch of it in the ground, at intervals of about twelve inches—nothing could succeed better. I have now a yard well set in beautiful sward, under the oaks, as well as in the open spaces.

If the land is in good heart, it will spread entirely over it in two years; and if it is not in good heart, top dressing will soon make it rich enough for the grass. No preparation of the ground is necessary in a yard, but no doubt it would be better. People frequently dislike to plough up their yards—let them take a hoe and dig a very small place, and put in a small sprig of grass, in March, and it will soon shew itself as a successful antagonist to any other plant.

For pasturage, no doubt it would be best to prepare the ground well; and rows of eighteen inches apart, and plants the same distance, will give a good turf sooner than you can get it from the seed, if the young shoots should be crippled, as they always are with us by the heat and drought of summer. Under oaks, if the leaves are suffered to remain on the grass, it will be destroyed. Transplanting can be commenced as soon as the grass shall begin to put out, and continued until the middle of May, if the weather is seasonable.

I have now discharged a debt which lay on my conscience; but it may be I am only telling your subscribers what they knew before. Be this as it may, as long as I avail myself of the information given through your paper, I feel I owe my fellow-subscribers a debt, if I *think* I have found out any thing, until I let them know. If they will all do likewise, we shall give great assistance to each other.

With best wishes for your paper and for the good cause it advocates,

I am, most respectfully,

Your obedient servant,

E. B. Hicks.

Lawrenceville, Brunswick, June 5, 1843.

We sincerely wish all of our subscribers were as *conscientious* as Mr. Hicks.

AGRICULTURAL EXHIBITION.

The Henrico Agricultural Society held their fifth fair at the old stand, "Goddin's Spring," on the first day of June. In the general stagnation of all business, it was refreshing to see with what zeal and interest our town and country people devoted themselves to the getting up this exhibition. It was really and truly a grand affair—far, very far, superior to any of a similar character which has ever been presented to our citizens. We arrived on the ground about nine o'clock, and immediately hurried off to the ploughing match, for which a level sward had been selected about a quarter of a mile west of "the Spring." Excited as we were, and as every body around us was, we could not help remarking, as we went along, the beauty of the morning, and the preparations nature herself seemed to have made for the occasion. A heavy rain had fallen the night before, putting the ground in the finest possible order. Every vestige of a cloud had fled before the triumphant march of the fiery sun, whose heat would have been oppressive but for the cool and gentle western breeze that gave life and motion to every flower and shrub.

As we rose the hill, the scene was novel and striking in the highest degree. In the midst of five hundred spectators, eight splendid teams, with ploughs and men to match, were silently and lightly progressing in lines as straight as an arrow, cutting and whirling the dirt with as much apparent ease as the joiner throws a shav-

ing from his plane. The ploughmen, some of the most substantial and respectable farmers in the county, were neatly and cleanly dressed, in the best possible taste, with every thing appropriate to the business in which they were engaged. Their loose shirt sleeves and the long black boots coming half way up the leg and protecting the white pantaloon, added much to the picturesqueness as well as fitness of their appearance. The interest upon the part of the spectators increased with every furrow, and the ploughmen themselves evidently became very much excited. As each competitor arrived at his last furrow, the crowd gathered about the end of the row with all the stillness and excitement that marks the closing of a horse race.—Each in his turn received the meed of public approbation, but when Mr. W. I. Grieve turned to finish his last furrow, and it was observable that such had been the evenness and regularity with which his furrow slices had been cut, that the comb or ridge left for the last turning, clearly defined by the green sod in the midst of the ploughed land, was as even and as straight as if it had been laid off with a garden line, and when in coming down, this comb was completely subverted in its whole length, there was but one opinion of the merits of the ploughman. This opinion was confirmed by the decision of the judges, who unhesitatingly awarded Mr. Grieve the premium, amounting to fifty dollars.

The skill exhibited by Mr. Grieve and other gentlemen on this occasion, satisfied many of what we knew long ago, that the plough is a very perfect and scientific implement, and, in the hands of a really skilful man, can be made to execute its work in a manner and style calculated to astonish those who have passed their life in witnessing its operation in the bungling manner in which it is commonly performed.—We know of no lesson more instructive to farmers, many of them called good ones too, than this ocular demonstration of what a plough can be made to do.

The ploughing over, we returned to the exhibition, which by this time had begun to assume a very imposing appearance. The show of stock was particularly fine, surpassing our expectations, and far excelling the exhibition of any previous year. Mr. Marx, with his beautiful lot of milch cows, from some of whom he is drawing, daily, five and six gallons of the richest milk for the benefit of our city market, and Mr. Stevenson, with his beautiful cow and her most magnificent bull calf, satisfied us, that we would have no longer to resort to the North for the best specimens of the Durhams and Ayrshires. The hogs too were very fine, and a gentleman who is himself a large owner of the stock, and who has visited all the northern establishments, expressed to us the opinion that he had never seen a hog, take him all in all, superior to the celebrated *Chesterfield*, the property of our old friend, Col. Burfoot. The assortment of agricultural and horticultural implements was varied and extensive; the fruits and flowers were luscious and beautiful; the evident improvement in the taste and skill of our city gardeners bears honorable testimony to the value of the labors of this association, which are felt and acknowledged by every individual who frequents our markets.

The display in the yard was very striking, the crowing of cocks, the cackling of hens, the whirling of machines, and the din of voices, gave an air of life and activity to the scene; whilst the fluttering of ribands and the waving of feathers afforded goodly evidence of that interest which the ladies have always manifested in these exhibitions. The capital address of Mr. Lyons, which was delivered with that ease and grace of manner for which he is so conspicuous, was listened to with the most profound attention, and the audience dispersed with many a hope expressed, that the Agricultural Society of Henrico would continue to flourish and increase in prosperity as long as it was identified with the noble pursuit, to which our southern people are so fondly devoted.

With respect to the particular articles of the exhibition, we shall take occasion to refer to them more particularly hereafter.

From Miss Leslie's Magazine.

THINGS WORTH KNOWING.

BY MISS LESLIE.

To Soften Sponges.—A sponge, when first purchased, is frequently hard, stiff, and gritty. To soften it, and dislodge the particles of sea sand from its crevices, put the sponge into a clean vessel of water, and boil it about an hour, (no more,) changing the water twice, or three times if it is very gritty; letting the sponge cool so that you can squeeze it thoroughly before putting it into the fresh water. When the sponge has become quite soft, and there is no more appearance of sand and grit, squeeze it out, and it will be fit for use. A brown sponge,

prepared in this way, is quite as good as a white one. But you may bleach it by adding to the water, when boiling, a few drops of oil of vitriol.

After using a sponge, always wash it immediately in clean water; squeeze it out, and let it dry.

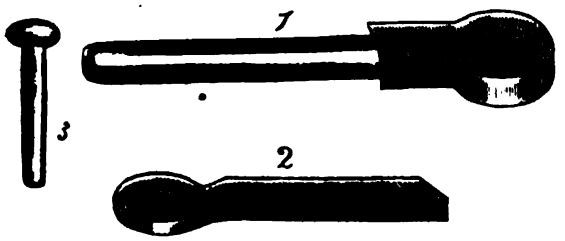
To Clean Looking Glasses.—Take a newspaper or a part of one, according to the size of the glass. Fold it small, and dip it into a basin of clean cold water. When thoroughly wet, squeeze it out in your hand as you would a sponge, and then rub it hard all over the face of the glass, taking care that it is not so wet as to run down in streams. In fact, the paper must be only completely moistened or damped all through. After the glass has been well rubbed with the wet paper, let it rest a few minutes; and then go over it with a fresh dry newspaper (folded small in your hand) till it looks clear and bright—which it will almost immediately, and with no farther trouble.

This methed (simple as it is) is the best and most expeditious for cleaning mirrors, and it will be found so on trial—giving a clearness and polish that can be produced by no other process. It is equally convenient, speedy, and effective. The inside of window panes may be cleaned in this manner, to look beautifully clear; the windows being first washed on the outside. Also, the glasses of spectacles, &c. The glass globe of an astral lamp may be cleaned with newspaper in the above manner.

Dusting Furniture.—If a hand-brush is used for dusting furniture, it should always be followed by a dusting cloth. A brush merely disturbs the dust without taking it up or absorbing it; and is only useful in dislodging it from crevices. Therefore, if the dust is not afterwards wiped up in a cloth (which should be frequently shaken out of the window) it floats about the room, and settles again; being only removed from one place to spread itself on another. A yard of sixpenny calico will make two small dusters, or one large one. They should be hemmed, that the servants may not regard them as mere rags, to be torn up, or thrown away when dirty.

For the Southern Planter.

CHEAP AND DURABLE HINGE.



Mr. Editor,—Permit me to describe to your readers a hinge applicable to gates of every description, which in point of durability, simplicity and economy excel any others I have ever used or seen.

The part to be inserted in the gate-post is to be made of seasoned oak, locust, or any other hard wood, 8 inches long and shaped like Fig. 1.

The hole in the gate-post to be bored with an inch and a half auger, and one inch of the outer part to be mortised square, to prevent its turning.

The part to be inserted in the frame of the gate is to be made of three-fourths or one inch square iron, five or six inches long, the upper surface at one end flattened, and a hole punched through the other end, as represented in Fig. 2.

Oak or iron pins, in the shape of Fig 3, passing through the holes in the two parts, hang the gate—it can be shipped or unshipped in half a minute. The bottom hinge to be placed some distance above the ground, to prevent rust or decay—a small piece of old shoe sole, greased, to be placed between the parts to make the gate open and shut more easily by relieving the friction

The part required to be of iron ought not to cost more than twenty-five or thirty seven cents; but even this may be made of *wood*, by those who prefer keeping their money to parting with it for any thing that can be made at home, and there are such. The part to be inserted in the gate-post may be secured by a nail or pin driven in obliquely.

Yours, A. TUNSTALL.

We had the pleasure of making the acquaintance of Mr. Tunstall, who was present at our fair on the first of June. We gathered from

him some capital hints, upon the subject of horticultural implements especially. Mr. Tunstall seems to have a great mechanical turn, which is no doubt of infinite value to him in his horticultural and agricultural pursuits.

For the Southern Planter.

FENCING.

Mr. Editor,—I have lately seen several communications in the Planter on the subject of fencing, and as none of the plans there laid down suit me as well as my own, I think it probable that a description of it might be acceptable to some of your readers. I object to some of the plans suggested, because they do not save enough rails, and to others, because they are too expensive and tedious. On the plan I propose, a fence can be made in as short a time and with one-third to one-half the number of rails that it requires to make a common rail fence. It is made by throwing up a sharp crooked bank corresponding exactly with the worm of the fence. The bank may be made high or low according to the number of rails you wish to save. The whole operation is simple and expeditious, and if properly done, makes a neat fence for ordinary purposes. The manner of operating is as follows:—If the ground can be ploughed readily, the plough may be used by throwing up a bed ten feet wide, which process may be repeated several times, so as to make less work for the hoes, taking care to have the middle of the bed where the fence is to run. The only service, however, that the plough renders is to make the hoe work a little easier and quicker and may be dispensed with if not convenient.

Where you wish to have the fence, lay the worm (as for a common fence) with as much precision as possible, stick up a stick two or three feet high in every corner, and then take up the worm. The sticks will show exactly where the bank should be made. Draw up with the hoes a sharp bank not wider at top than the thickness of a rail, and take care to have it straight from one stick to the other and make it a little higher than necessary, as it will settle a little. It is not necessary to give the worm more than about three feet crook, for it will stand much better than a a fence made altogether with rails. It may be made still stronger by using stakes and caps—and when stakes and caps are used, the crook may be reduced to two feet. I prefer stakes and caps decidedly to stakes and riders, because they make the fence stronger and much lighter and the rails do not settle and mash into each other as much, and besides, it takes less timber, as the stakes need not be more than five and a half feet long. If these are used they should only be stuck in the ground a few inches, so as to make them stand erect—then put on the caps, draw the bank up to the stakes and ram the dirt around them so as to make them firm.—When it becomes necessary to repair the fence, it will only be necessary to raise the bank a little higher, which can be very easily done, and the same rails will answer the purpose. A fence on this plan does better than if made on the bank of a ditch, and the labor can be performed by any person that can handle a hoe, and requires no more time than a fence made entirely of rails.

Very respectfully, &c.

WM. B. MILLER.

Halifax, Va., May 10, 1843.

We are glad to see that our efforts are drawing out communications upon this important subject. For our own part, we have seen no plan yet that we thought so good, nor so economical, as the post and rail, especially, if the posts are mortised in rainy weather with the facilities we have recommended.

PLASTER.

A young farmer desires to know how he shall use plaster. Our advice to him is, to use it freely on all his crops, our opinion being, that, at the rate of a bushel to the acre, it will do good to any crop, and the more where the land may have been previously limed. Let him mix it in the proportion of one bushel to twenty cartloads of manure, as he may be preparing his manure to be hauled out, or sow it, in that proportion, after his manure may be spread out, and previous to its being ploughed in: let him spread it on the surface of his ground after being ploughed, and then to be harrowed in: let him put it, mixed with ashes, in the proportion of one bushel of plaster to five of ashes, in his corn hills, or potato rows, graduating the quantity of the mixture to a gill for each corn hill or potato set: let him sow it in the first named proportion over his grain fields, his meadows, and his old fields, and he cannot go amiss. The range we have here marked out, is extensive, but not more so than it is calculated to do good in: and, in a word, we will say to our inquirer, that he will find it to his interest to sow it any where, where he may have growing crops, as it will attract moisture and food from the air and from the earth, and like a good nurse, dispense it to the growing plants in such proportions, and at such times, as may be required by their wants.

But while the agricultor may be providing plaster, let him not forget, that it always acts best where, as we have before premised, the land may have been previously limed.—*Am. Farmer.*

CORN.

The following is an extract from a letter received from a friend in North Carolina:

"Mr. Woodson is correct in his ideas of planting corn very early. It is our practice on the Roanoke. His rows are much too narrow for our purposes. We prefer 5 by 3, leaving generally two stalks in a hill. *Listing* just before planting is an admirable plan in light, low grounds. It will not do so well in aluminous soils, high or low. He works too much, as a *general rule*. The number of ploughings should be regulated entirely by circumstances, of which each farmer must judge for himself. The character of the season—the quantity of grass—the nature of the soil, and the general appearance of the crop must determine it, and a judicious manager will accommodate his labor to these things. There is no formula for making the corn crop. *General principles* must be consulted in this as in every thing else. Nor will the same description of plough always be the one to use under all circumstances. The winged coulter answers a very fine purpose at first, and in *every stage* of the crop when the grass is very small and young. We regard the turn plough invaluable in low grounds. *Barring* the corn, *lapping* the grass in the centre of the row, *splitting* it again and *destroying* the corn, are its varied uses. I suppose every farmer on James River understands the use of this plough. In Roanoke we plough *every other row* through the crop from the beginning, and every other row is, of course, worked differently. Let me urge you to impress upon the community the advantages of this system of cultivation. They will force themselves upon the reflecting manager at the bare suggestion. Corn never fires when thus worked. A third more can be cultivated—grass never seems to injure, as one row is always in order, and on high lands the washing from heavy rains is not half so great. These are important facts, and I speak from experience.

"The Dutton corn I find will yield twenty per cent. more than any other I have ever tried. The fact has been well tested.

"Why do you not give us a price current at the end of each number of the Planter? Such information is very valuable, and as a matter of reference hereafter, may be still more so, as the work is generally preserved.*

"Our wheat is much troubled with the chinch bug, and there is much reason to fear the crop will be a short one. The fly has well nigh destroyed every tobacco plant in this section, and many planters are planting their lots in corn and cotton.

Respectfully,

THOMAS GOODE TUCKER."

* We abandoned our price current, because, we thought we could fill its place more to the satisfaction of our readers, the most of whom take daily or weekly papers affording them the same information. But finding that our head of "Markets" was more esteemed than we had supposed it to be, we have made arrangements for resuming it under the auspices of Messrs. Ludlam, Preston & Co. who have kindly undertaken the charge of this department.—ED.

HANOVER AGRICULTURAL FAIR.

We have received from the Secretary a report of the meeting of the Agricultural Society of Hanover, held at the Court House on the — day of May last. The gallant Secretary rejoices much in the presence of the ladies who attended, and mourns grievously over the absence of all those who did not make their appearance. Our gallantry was a little dampened by the rainy day, or we would have been there to rejoice, and sympathize, with our friend, and also to listen to the address of Dr. Braxton, the President, which we hear spoken of as a splendid thing.

We are requested to publish the awards of the premiums, which comprises a long list; with this request, as with every other from the same source, we would gladly comply, but the fact that to Mrs. such a one was awarded $2 50 for the best butter, is of such a local character, and of so little interest to ninety-nine hundredths of our subscribers, that, as will be seen, we have omitted all such details in our report even of our metropolitan meeting. We are at all times happy to receive and publish general notices of such meetings, as well as any particular occurrence of general interest.

For the Southern Planter.

COMMENTS ON THE MAY NUMBER OF THE SOUTHERN PLANTER.

Pasturage versus Tillage.—The information gained from old, experienced, and prosperous men, is always valuable; and it is to be regretted that such men are not more communicative with the goose quill. But I know from experience, that age begets a dislike for mental labor; yet by writing only a few sentences at a time, the mind is so far from being fatigued, that it is only properly and profitably exercised. The remark of the experienced farmer here quoted, that "money coming in a lump, as it does to a tobacco planter, is generally spent improvidently," is a truth and misfortune which I have often felt, seen, and regretted. Perhaps the Eastern portion of Virginia, can never equal the Western, in the production of spear grasses; for the

latter has the advantages of lime, more copious dews, and facilities of irrigation. There is, however, one native of Eastern Virginia, which under proper nurture may finally rival the timothy of the West; I mean the green-sword. I incline to think that this grass does not need artificial watering, but does require artificial liming. The richer soils of Eastern Virginia are generally too porous, and the clays generally too poor for grass. Ashes and the treading of cattle are the best improvers of porous lands; and urine and dung are proper for clays.

The Corn Crop.—Mr. Woodson's method of preparing his corn ground, will answer in porous ground, not cumbered with turf or long litter; but otherwise, the planting and culture will be a dragging business. I feel disposed also to condemn his method of planting in squares of three feet, as well as his breaking and tearing the roots in its culture; but will only remark, that if his corn is as large as it should be, I cannot conceive how he can plough amongst it when grown, or nearly so, without tearing and breaking it shamefully.

Richard Russell's Farm.—My respects to this Mecklenburger, and to all his full blood brethren.

Ploughing.—The object in bedding land, is to create drains; and therefore, the width of the beds should accord with the nature of the land. The width of three corn rows will, however, be found to answer pretty well in any situation. The greater necessity for draining, the higher the beds should be raised by a succession of ploughings.

Culture of Tobacco.—I vouch for every thing "A Planter" says; but let him be cautious of permitting hogs to root his clay ground when wet; particularly in spring.

Manure.—Mr. Jones holds a bold pen, and I could have read his work with much comfort, if he had not expended so much ink; yet, I will add another line to what he has written. In warm weather, stock are so much plagued by flies, during the day, that they then feed but little; consequently, if penned, they should be pen fed. But horses, cows and sheep, particularly the latter, require pure air; and if they be never housed or penned, except as protection against inclement weather, so much the better.

A Young Planter is certainly mistaken as to clover (ungrazed) being an exhauster, without plaster. His assertion that tobacco will take rot, if the crop is not worked after a certain time, is true; but it is also true, that short work produces short crops.

Practical Directions for Dung Heaps.—This is well worth the attention of farmers. My own dung pits overflow on a meadow, consequently, nothing is lost.

COMMENTS ON THE JUNE NUMBER.

Woodlawn Farm.—I wish Mr. Scales had given his communication a caption. It is certainly the greensword seed which he is desirous of obtaining, and not what in Virginia is generally known by the name of *blue grass*. It is useless to sow this grass on land which will not produce good wheat; and the richer the better. Either lime or ashes must be applied, to bring it to profitable perfection, according to my observation and experience. I prefer a mixture of red clover and greensword, (Kentucky blue grass) as they thrive on land of the same quality, ripen at the same time, the mixed hay is best, and they are both improved by plaster and ashes. Does not Mr. Scales know that this valuable meadow grass, is the same which I suppose he has in his yard? Now, my dear sir, don't turn away with loathing, but hold on; for I tell you that I have several acres of greensword meadow, which I would not exchange for like quantity with any man.

Curious Method of Planting Corn.—Some years past two of my neighbors prepared and planted their corn in the mode here mentioned; one of whom is dead, and the other has abandoned it. If corn-stalks are the best manure for a crop of corn, it would seem that from the same mode of reasoning, potato-stalks are likewise the best manure for potatoes, yet this author seems to repudiate the idea.

Post and Rail Fence.—This plan of boring and mortising posts has been practiced in Kentucky for many years, with some difference perhaps in the construction of the bench.

On the Comparative Advantages of Herdsgrass and Clover.—I am pleased with this communication; for the author exhibits zeal and honesty of purpose—one objection, nevertheless. He says, "the long practice of seeding poor, thin, and pipe clay flats in herdsgrass, has satisfied me of its great value." Now, so far so good; for such clay is the natural place for this grass. But when the author says, in a general remark, that "no vegetable matter can be raised in greater abundance than the herdsgrass, nor is any more valuable as a manure, I must beg leave to differ with him in opinion.

Soot as a Manure.—I suppose cool soot was printed for *coal* soot. Query, is not wood soot equally as valuable as coal soot?

Ploughing.—One objection to gathering the beds, as here recommended, and that is, an awkward ploughman, particularly when the beds are wide, will make the number of furrows unequal on either side of the bed, consequently, the beds will be of unequal widths; whereas, if they are cast out, till closing in the water furrows, they will ever remain equal, whether you begin on the crown, or on the original water furrow.

Stones on Cultivated Lands.—I cannot conceive how stones of quartz, flint, or diamond, can "serve to increase the crop," except by absorbing

and giving out heat, where heat is wanting. As to stones preserving moisture during a drought, I would as soon believe that hot stones would hold water in a pot. Green stone, feldspar, and others which contain matters that are valuable as manure, and which matters are continually given out by decomposition, should not be removed from the fields, except when in large masses; and then perhaps it were better to beat them into small pieces, and scatter as manure.*

I am noticing the writings of Galen, and hope that when he has laid his premises, he will then give us the deductions, applicable to *agricultural operations.*

INVESTIGATOR.

The following is a very valuable testimonial to the advantages of soiling cattle. The calculation is a very simple one, and may be made by each individual to suit his particular circumstances. The saving of food and manure is to be offsetted by the increased labor of cutting and hauling.

The system is daily gaining ground in public opinion; its advantages, however, will vary much with circumstances; in an enclosed, highly cultivated country, we have no doubt it should be universally resorted to.

From the Cultivator.

SOILING CATTLE.

Messrs. Editors,—From the many letters addressed to me since the publication in your November number of a communication relating to Bokhara clover and soiling, it seems necessary that I should explain what appeared to my respectable correspondents so extraordinary—the having fed so numerous a herd from so small a quantity of land.

My stock of cattle for the last three years, has not been less than forty head, which, had I pastured in the usual way, would certainly have consumed all the grass on my farm, leaving none to mow, which I obviated, as I said, "by keeping them in good condition on some three to four acres." It would have been better, had I said, *with the aid* of three or four acres in lucerne, rye and clover, which enabled me to save more than one hundred tons of good hay.

I must also add, or throw into the account, a lot of eight or nine acres, in which there is a stone quarry. Its condition may be understood when I say, had it been allotted solely to one cow for the season, she would have been doomed to short commons. There was, however, good water in the lot; this, with the change and exercise it furnished, made it of considerable value for the purpose of soiling. It may also be proper to remark, that I own a woodland farm, distant about two miles from the homestead.—Thither I send, in the spring, about a dozen dry cattle. This division left me on hand last summer, to provide for at home, about twenty head full grown cattle, and a few full blooded young heifers, and several calves.

My resources were two acres in rye and clover; both seeds sowed at the same time, the previous August, and one acre of lucerne, in the spring of 1841. I also sowed, in order to be fully provided, an acre of Indian corn, broadcast, which was not used green; it was cut and cured for winter fodder. I began to cut the rye for the cattle in the middle of April; it was very thick and quite tall, shooting into head; before through with it, the heads were formed. It was cut high, to save the young clover that stood with it. The rye fed off, the lucerne was ready; stalks as high as two and a half to three feet. When the lucerne was fed, then the rye and clover was fit for cutting; and it was surprising to see the second crop of rye so thick and tall. This time, clover cut with it. This through, the lucerne, which may be called "cut and come again," was provokingly tall, and yielded a heavier crop than at first. Then the clover which had been once cut, was ready, and before through with it, the lucerne was again fit for cutting. It and the clover were cut alternately, or fed together, as convenience or fancy might determine. Before my season for soiling (the middle of August,) ended, the lucerne's third, and clover's second crop, were not consumed. The remainder was cut for the hogs, who had all the leavings of the cattle previously. In fact, this proved very beneficial to them. I had about twenty large hogs, and some sows and pigs. In the hot weather, confined as they were to their pens, what the cattle left of the rye, lucerne and clover, was refreshing and cooling to them.

I said my season for soiling ended the middle of August. Why? Because I cut no second crop for hay. The cattle were then turned in upon the orchard grass and clover fields, "up to the eyes," and from middle of September till 1st October upon the timothy fields—in all, some sixty acres, on which they made but little impression. Early in November they were withdrawn, and put to turnips and other roots, of which I have generally a large supply for winter.

No one can see my grass fields in winter, without being surprised at the thick and closely matted sod that so perfectly covers them. In-

* Stones indubitably by the covering they afford protect the earth from the rays of the sun and so prevent evaporation. We have often noticed, and we wonder that should have escaped the attention of so diligent an observer as "Investigator" that the most luxuriant tufts of grass or wheat in a field were those growing from underneath the stones. We cannot imagine that this fact is in any way connected with the nature or composition of the stone.—ED.

deed, were a sensible farmer led over them blindfold, he could not but appreciate their condition, for their softness and elasticity would prove it to him; and this too, on some of the highest lands in the highlands of the county of Philadelphia, washed by the Schuylkill, and the more romantic and precipitate Wissahiccon, on whose banks, in my immediate neighborhood, the laurel grows as luxuriantly as on the shelving slopes of the Blue Mountains.

But to return to the feeding the green food. That cut late in the afternoon, was fed early next morning; that cut early in the morning was fed at noon; that cut about noon was fed that evening. This was the general practice. No more was brought into the stables at a time, than what was supposed to be required for one feeding. When the cattle were fed in the morning, they were turned out to the yard, and there left to stand for at least half an hour, or while their troughs and stables were being cleaned; then drove to the quarry lot above described.—The yard was then cleaned, every dropping put away carefully on the dung heap. Before, or by eleven o'clock, they were brought home and fed; and by four in the afternoon, when the sun was declining, turned out as in the morning, drove to the lot; from which they were brought back by sun setting, and fed—remaining in the stables all night. The cattle had no other food, except occasionally a little good hay, which they were provoked to eat a handful of, as often as possible, and which is very necessary where so much green food is consumed. If the hay be thrown to them in quantity, while on green food, they will but waste it, not eat it. The best way is to tempt them by a handful, which, if they bite at, and eat, they may then be served with a small wisp in their troughs or racks.—This, with a regular supply of clean salt, was all the food they had from middle of April till middle of August, a period of four months.

Now as to the expense. One man and a boy, whose united wages were seventeen dollars per month, did all. The patch from which the food was cut, was, as it should be, close to the stables. The supply was brought in on hand barrows, wheeled into the entry, and served by hand into the troughs. Sometimes, when the horses were not specially engaged, a horse and cart was permitted; but this led to bringing too much at a time, and its being tilted at the door, carried on a fork some distance, tossed and turned too often, which rendered it objectionable, to say nothing of the danger of the food attracting some dirt or rubbish. Cleanliness in feeding cattle, is at all times essential, but in soiling it is indispensable; unless the troughs or racks are well cleaned after every feeding, and the stables kept clean and well ventilated, the cattle will assuredly fall off in appetite, if not take a specific disease. The expense of this practice was in reality nothing to me; it was some work superadded to the man and boy, who would be engaged taking care of this number of cattle, in cleaning them, driving them to and from the fields—the Durhams having to be milked three times a day—the keeping the stables clean, and taking special care of the manure. But suppose this man and boy to be extra help, then am I sure it cost me not a farthing. Every two horse load of good manure, purchased in the city, laid down on my place, will stand me in five dollars. Then am I free to say, that the extra quantity of manure saved by soiling, was not less in the period of four months, than twenty loads. From this is to be deducted extra straw, rent of the three acres, and cost of producing the green food. But the great profit lay in the many acres producing two tons of hay to the acre, which if the cattle had been turned out upon, by the first of May, would have been despoiled; and which was prevented, by feeding them from the three acre patch, behind the barn.

Simple as these details are, they may seem to some difficult to put in practice. To such, I can only say—try; but let them not begin till they are prepared, having a good patch of orchard grass and clover, lucerne, or corn. Rye, I do not recommend; when quite young it may do, but when in head and filling, it is not good. I adopted it because it came early. How many are there, who, if they would mow the headlands of grain, corn, and potato fields, might in this way furnish a considerable item of the food requisite for soiling, to which might be added the extra shoots in corn hills; all this would benefit the lands by clearing the weeds from the fences, and it would pay, so far as the growing corn is concerned. Our southern friends might derive much benefit from partial soiling. A close or strict soiling, in our climate, I would recommend to none. But the appropriating one field, where there is water or shade, for air and exercise, while many fields may be used for cropping, that otherwise would be made bare by the cattle, and their equivalent in grass made from three or four acres, is a practice that may find favor with all, on arable, light, upland soils.

Respectfully,

JAMES GOWEN.

Mount Airy, Philadelphia, Feb. 6, 1843.

JOHNSON'S FARMER'S ENCYCLOPEDIA.

We are indebted to the kindness of the enterprising publishers, Messrs. Carey & Hart, of Philadelphia, for the numbers, as they are issued, of the American reprint of "the Farmer's Encyclopedia and Dictionary of Rural Affairs." This work, which from the celebrity of the author, has had a great run in England, is pub-

lished there at about fifteen dollars. The freedom from taxation, and the enterprize of our publishers, afford us the same work, issued in neat semi-monthly numbers, for *four* dollars, less than one-third the English price. That the work is well executed we have the surest guarantee in the character of the author; as to the plan, there is no department of art or science, to which the convenient form of alphabetical arrangement is more applicable, than agriculture. Information upon the multifarious and everlasting subjects coming within the comprehensive range of a farmer's studies, are a hundredfold more valuable for being so arranged, that he can turn to them at once when he wants them, as he always does, at a moment's warning. For these reasons, we are of the opinion, that, even in these days of cheap literature, a farmer can make no disposition of four dollars, that will enure more to his own benefit, than to send them to Messrs. Carey & Hart, of Philadelphia, with an order to mail him, as they are issued, the numbers of this excellent work.

For the Southern Planter.

COVERED DRAINS.

Mr. Editor,—Having succeeded in draining a part of my lowgrounds, which was very wet from springs issuing forth, I concluded to attempt to obviate this redundancy of water by underdraining. As my plan has fully answered my expectations, and as it differs, to some extent, from any of which I have read, I have concluded to give you a hasty sketch, which if you think of sufficient interest, you are at liberty to publish in the Planter.

I had ditches cut three feet deep, and as narrow as a man could conveniently work in, which I found was about two and a half feet at top, and the width of a shovel at the bottom. They were so graded, that the water would run off freely to a large open ditch passing through the lowgrounds, and so located as to catch as many of the springs as possible in their course, and carry them off. The slate rock, found in our river hills, and generally near the lowgrounds, was the material selected to make the water-way. The bottom of the ditch was first paved with the thinnest rocks, then thick, long, narrow rocks were laid on the paving-stones, on each side of the ditch, leaving an interval of several inches in the middle for the water to pass off; the broadest rocks were put on the top, covering both the side rocks; and all the small rocks and pieces were used to fill the small cavities not entirely closed by the large covering rocks; then a stratum of straw, or leaves, was thrown on to prevent the earth from getting into the water-way, and the whole was finished by filling the ditch with the earth taken from it.

In making the stone work, or water-way, it is absolutely necessary to begin at the head or upper end of the ditch, to prevent its being choked, or filled up with earth washed down whilst being constructed.

In the last two years, I have had between three and four thousand yards in length, of covered drains made as above described, and not one of them but answers the purpose admirably.

Covered ditches are more costly in their construction than those that are open, nor will they supersede the necessity of open ditches to carry off rain water, nor that of branches and creeks; but to drain springy lands, particularly when carried to the fountains, they are much superior: first, because no land is lost; secondly, if made as deep as I made mine, the plough can pass over them without injury; and, thirdly, they need no repairs; whereas, the open ditches take much land, the ploughs have to turn when near them; consequently head lands must necessarily be left, and they require annual cleaning out.

The cost of constructing covered drains, may be an objection to some persons, but this is less than would at first appear. A man accustomed to the use of the shovel, on land free from rocks, gravel and stumps, can, with ease, cut thirty yards of ditch as above described, per day. A man, and a boy to hand him rocks, can make sixty yards of water-way after the rock is hauled to the side of the ditch; a cart, oxen, driver and a man to assist in loading, can haul, when the rock is not more than two hundred yards distant, enough to make sixty yards of water-way. The filling up of the ditch can be done by the plantation hands, when their labor could not otherwise be profitably employed; but allow one day for a man to fill up a ditch of sixty yards, then we have, to cut sixty yards of ditch, two days labor—to make the water-way, two days labor—to haul rock, two days labor—and to fill up, one day's labor; altogether,

Seven days labor, worth, say, two shillings per day,	$2 33
Cart and oxen, worth per day,	1 50
To make sixty yards of covered drain,	$3 83

or about six and a half cents per yard. But when we take into consideration, that we frequently use rock that is an encumbrance, and by putting it in the drains, get it out of the way of our ploughs, &c. (as has been the case in all the covered drains which I have made); and that the covering can be done by the plantation hands when too wet to work elsewhere, we discover that the cost will be considerably lessened. Should it, however, cost double the amount I have estimated, particular locations would, in my opinion, justify the expense.

Hoping that this hasty sketch will be of service to some persons who have wet, springy land, I remain,

Yours, &c.

RICHARD G. MORRIS.

P. S.—The recipe furnished by Mr. Craven in your May number, for making whitewash, I have just tried; it is most excellent, does not rub in the least, and is, alone worth one year's subscription to the Planter.

R. G. M.

A PLOUGHING MATCH.

So satisfied are we of the advantages resulting from the emulation excited by the noble contest which we have lately witnessed, that we have opened a subscription paper at the office of the Planter for the purpose of raising a premium, (which we hope to make $100 at least) to be given to the successful competitor at a ploughing match, to come off, this fall, in the neighborhood of the city of Richmond. To this premium, farmers and others, who feel an interest in the subject, are invited to contribute what they please, from twenty-five cents to an hundred dollars. We do not believe that those, who could be present on the occasion, could make a better investment than a small contribution for the purpose proposed. A handsome premium, such as might be raised, would bring together skilful ploughmen from all parts of the Union, which would afford the farmer an invaluable opportunity of seeing and comparing the numerous varieties of the plough, some of which are brought to a degree of perfection little dreamed of by some of our countrymen.

P. S.—About thirty dollars have been already subscribed, and we are highly delighted to find that we have not over-estimated the public appreciation of the value of such an institution.

We will try and have a dynamometer at hand upon the occasion, with which the draft of different ploughs may be tested.

CREDIT QUOTATIONS.

The Southern Planter will find upon re-perusing this article, that the N. E. F., and not itself was the party in question. We have ever found the S. P. particularly scrupulous in giving credit for extracts.—*American Agriculturist.*

We will not re-peruse the article to see whether we were justifiable in inferring that the "Agriculturist" intended to charge us with plagiarism. It is enough for us to know, that the Editor disclaims such intention, and the mortification naturally arising from such a charge, from *such a source*, is more than cancelled by the promptness and kindness of the explanation.

HAY MAKING.

As the time is just at hand, when every farmer should pay some attention to hay making, it will be in keeping with our vocation, to give what we think important directions to those unpractised in this business.

Clover hay being generally the first to be sown, and it being quite difficult with most, to sow this kind of hay in such a manner as to repay for labor, we will tell something of our own mode.

Generally, by the middle or the last of May, red clover is in full bloom. When in this stage, it should be watched closely, and when about two-thirds of the heads have turned brown it is ready for cutting. Of course fair weather is the best. Use a mowing blade. When it is cut let it be left as thin on the ground as possible, and let it lie in the sun, till it is not only fully wilted, but till most of the watery particles have evaporated; though it should not be suffered to dry so as to crumble. The time it should lie in the sun is attended with too many contingencies to give any specific directions.—From six to twenty-four hours is the usual time allowed. When sufficiently sunned, haul it to the shelters if there are any on the place, throw in hay till it is about a foot deep slightly pressed down with the fork; next take a stand so as to be able to throw salt on every part of the bed. The amount of salt is regulated pretty much by the judgment of the operator. It should be sprinkled in till there is as much salt as is supposed will be pleasant to the stock. We have generally succeeded best, in putting not more than six or eight loads together at a time.—When there is a large amount of hay put up at the same time, and particularly if it is too green, it is apt to ferment, and it often rots. To avoid this, let it become as well seasoned as you can, so as not to become dry, put in plenty of salt, and after you put a few loads together wait on it till it is properly seasoned, and there is no mistake of having the best of hay for winter use.

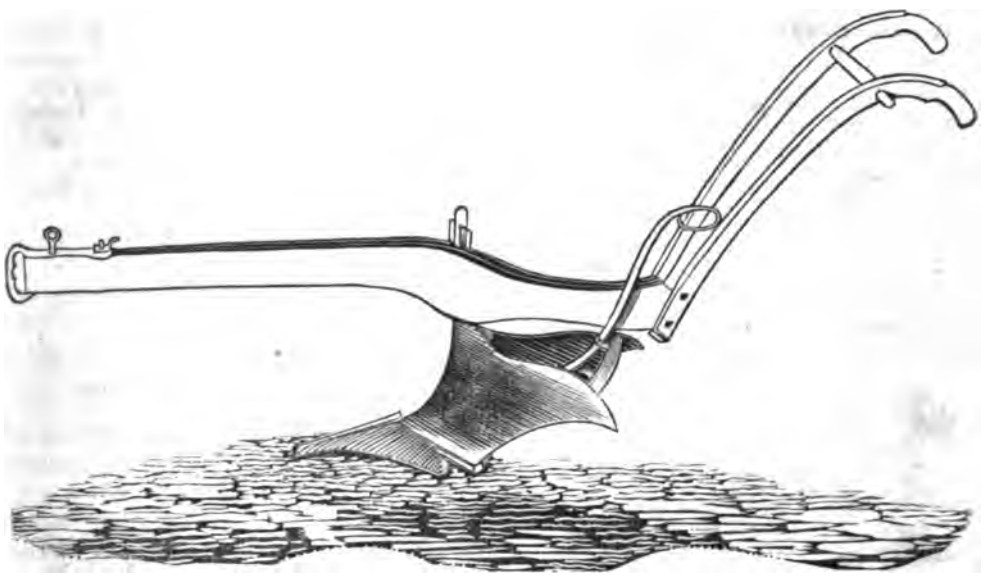
Timothy and other kinds of grass might be saved profitably in the same manner, and farmers should remember good hay will winter cattle without any other sort of food. Our young cattle have had nothing but salted clover hay since last October, and they have done finely, notwithstanding the unusually hard winter.

In reference to all the minutia of saving timothy and herdsgrass for hay, we cannot speak so

fully from experience; but the following are the most important points. About the time the seeds ripen, and before the blades get too dry, commence mowing. Let the hay have sun till it is wilted and about half dry, then put it in cocks supposed to contain from 180 to 200 lbs. when properly cured. Be careful to put it into cocks every night to protect it from the influences of the dew. If hay be left out in the sun till cured, it will be found to have lost most of its strength and sweetness; and of course will be of but little value. When cured without dew or rains in neat little cocks, the hay will be found very sweet and excellent. Judgment is to be exercised, if success is to be anticipated.

Tennessee Agriculturist.

HILL SIDE PLOUGH.



With the improved system of farming that begins to prevail, a considerable demand has arisen for a good hill side plough. The throwing dirt up a slope is found to be an *uphill* business, and is far too slovenly a mode of proceeding for the present generation. The old side hill plough, commonly known as Rhodes', in which the mouldboard turns over, is inconvenient and troublesome, and the want of a more perfect implement has been generally felt. In an early number of the Planter we sketched and described another principle, introduced here as Tinkler's, which is still very popular with some. But two new candidates for popular favor have lately appeared amongst us. One of these is M'Cormick's hill side plough, and the other is the celebrated northern plough, known as Barnaby & Moers'. The plough represented in the engraving was patented by Cyrus H. M'Cormick, of Rockbridge, Virginia, in 1833, and is probably the original of the northern plough.—They both belong to that class which, like the old "trench plough," is produced by the union of two mouldboards. This trench plough, which is so old that "the memory of man runneth not to the contrary," was formed by putting together the land sides of a right and left hand plough, by which you would have a double mouldboard, a double wing, and a double point. The beam was immoveably fixed over the centre of the plough; consequently, the dirt was thrown equally to the right hand and the left, and it was found very useful in opening water furrows, or trenches, whence it derived its name. Now it is very evident, that if the beam, instead of lying over the centre, should be turned to one side, so as to lie over one of the mouldboards, that mouldboard would become in effect, a land-

side, and the whole turning would be done by the other mouldboard. This is exactly what Barnaby & Moers have done: their beam shifts from side to side, converting the old trench plough, at pleasure, into a right or left hand plough. And this is exactly what M'Cormick, and others, we believe, before him, had done before them; but the peculiarity of M'Cormick's plough consists in this, that, instead of having a double point, he has a single point, which revolves from side to side as either mouldboard is, by the shifting of the beam, converted into a landside. Mr. M'Cormick contends, that, by this arrangement, at the expense of a little trouble, which practice soon reduces to nothing, he procures the only *self-sharpening point* that can be devised. The point being turned over at the end of every row, is, of course, worn equally from the top and bottom, so that the original form is always preserved. By this means, also, the wing is entirely removed to the turning side, and, as it is contended, a more perfect landside is formed. On the other hand, it is claimed that in Barnaby & Moers' plough, the half of the double wing that remains on the landside, by cutting under, as it does, prepares the next slice for the cutting and turning, which is done with the greater facility. The apparatus by which the beam is shifted from side to side, is simpler and stronger, we think, in M'Cormick's plough than in the other. Our own opinion is, that there are points in each better than in the other, and that from the two a plough might be made, combining the advantages of both, that would be better than either.

We do not see that this principle of the double mouldboard plough with the shifting beam, is ever likely, as its sanguine advocates expect, to supersede the common plough on level land; but if it can be made sufficiently cheap and simple, the various purposes to which it can be adapted, will render two or three of them very desirable upon any farm of considerable extent.

With respect to Barnaby & Moers' plough we have long suspected that they used one of the most perfect shaped mouldboards known in this country. It was to this circumstance, rather than to any other peculiarity of construction, that we have been inclined to credit the ease of draught for which they have obtained much celebrity. Their standing in this respect will be considerably elevated by the following certificate, which some friend from Loudoun has been kind enough to forward us:

TRIAL OF PLOUGHS.—LOUDOUN COUNTY, VA.

We, the undersigned, were present at the trial of the ploughs mentioned below, at the farm of Joshua Nichols, in the Goose-Creek neighborhood, report as follows:—The ground was a stiff sod, the ploughs in competition were Tavener's coulter plough, the M'Cormick plough, and Barnaby & Moers' double mouldboard.

Tavener's plough averaged in depth	6½ inches.
Breadth of furrow	14½ inches.
The draft by the dynamometer	725 lbs.
The M'Cormick averaged in depth	6½ inches.
Breadth of furrow	13 inches.
The draft by the dynamometer	650 lbs.
Barnaby & Moers' plough, depth,	6½ inches.
Breadth of furrow	14 inches.
The draft by the dynamometer	450 lbs.

The work done by Tavener's and Barnaby & Moers' ploughs were equally good; that by the M'Cormick plough not quite so well.

THOS. NICHOLS, ESQ.
ELI JANNEY.
JOSEPH GORE.
JOHN SMITH.
TIMOTHY TAYLOR.

June 2, 1843.

DELINQUENT SUBSCRIBERS.

From a fair experiment, we are perfectly satisfied that the credit system will never answer with a dollar paper. We were earnestly requested to extend our time of payment to sixty days from the date of subscription. Our friends said, we can get you numberless subscribers, but it is often inconvenient for individuals to pay the money or make the change at the time they have determined to take the paper, and afterwards, for want of opportunity or for other reasons, they neglect it, and so you lose many subscribers, whose names we could send you and who would assuredly pay you within the sixty days. We were induced by this course of reasoning to adopt the credit system, but to make sure of the payment, we imposed an additional tax of fifty cents upon all those who did not comply with the sixty day rule. The consequence is, that out of our small subscription list, we have five or six hundred from whom we have never received a cent. To each and every one of these gentlemen we have enclosed a bill for $1 50, with a request that they would promptly discharge the debt by remitting us *one dollar* through the postmaster. Those who

do not choose to comply with this moderate requisition, can neither wonder, nor complain, at our taking the necessary measures to enforce the payment of the full amount; which we shall proceed to do immediately after allowing due time for the effect of this, our last notice.—We are very sure that three-fourths of these delinquencies proceed from forgetfulness and are due to the smallness of the amount involved: therefore, it is only necessary to remind such gentlemen that they are indebted to us, to procure the remittance.

BOMMER'S MANURE.

We know of no invention that has excited more curiosity than Mr. Bommer's new process of making manure. We have had hundreds of applications upon the subject, and we have returned but one answer to all the applicants, viz: "We have no personal knowledge upon the subject, but we have put the matter in the hands of a gentleman in this neighborhood, to be thoroughly tested by him, and his report, whether for good or for evil, will be published in the July number of the Planter." This report, which we are happy to find is of the most satisfactory character, is contained in the letter below from Mr. Woodfin. It is unnecessary for us to say any thing in this community of the standing and respectability of this gentleman; to those to whom he is unknown we will say, that we selected him as one of those individuals whose testimony would go as far as any body's. Mr. Woodfin is also known to most of the readers of agricultural papers for his skill and science in agricultural chemistry, to which, of late years, he has devoted much of his attention.

For the Southern Planter.

MR. CHARLES T. BOTTS:

Dear Sir,—Having been requested by you to give a candid statement of my opinion of Bommer's patent method of making manure, for publication in your July number of the Planter, I will now with much pleasure proceed to say all I know about it.

On the 13th of May at night, I finished the preparation of a heap, according to his method, composed chiefly of dry wheat-straw, to which I added a small quantity of coarse unfermented stable litter, which was also, mostly, wheat-straw, and proceeded to treat it according to the directions laid down in his pamphlet. On the 18th day after the heap was constructed, it was opened in the presence of a number of farmers, and other gentlemen feeling an interest in the matter. It was found not to be entirely decomposed, but in a high state of fermentation, which gave evidence that entire decomposition of the materials would very soon be the result: in order to facilitate it, however, I gave it another watering with the lees, which has effected the complete decomposition of the whole mass.—According to Mr. Bommer's method, entire decomposition should have been effected in fifteen days, and I have no doubt such would have been the result, if it had been conducted with more skill; up to the tenth day, I had succeeded in producing a very high degree of heat; on that day, I gave it a very copious watering, thereby adulterating the lees too much, which caused the fermentation to subside in a measure. If the third watering had been properly made, with the lees in sufficient strength, I have no doubt the result would have been more satisfactory. As it is, I have succeeded in thirty days, in accomplishing that which I could not, by any method known to me, have accomplished in six months. I have never used any of this manure, this being the only heap I have made, I cannot, therefore, speak of its effect on vegetation; from its appearance, however, and my knowledge of the materials used in its manufacture, I should consider it of far greater value than the best stable manure, made in the usual way; I would not now exchange mine, load for load, for the best I ever saw.

This method, as Mr. Bommer justly observes, has the advantage over all others by enabling the farmer to have his manure when and where he wants it. I shall make another heap in a few days, mostly of green weeds, grass roots, &c. &c. when, if you desire it, I will give you the result.

To make manure by this method is not costly, but somewhat troublesome; but what good thing can be obtained without trouble or expense?

I have thus, sir, given you a candid statement of all I know at present about Bommer's patent manure,

And remain, very truly,
Yours,

GEO. WOODFIN.

June 13, 1843.

From our conversations with Mr. Woodfin, we know, that this report is, as it should be, as careful and guarded as possible. He felt the responsibility of the task imposed on him, and determined to say nothing, however sanguine his anticipations might be, that could, by possibility, induce the public to think more of this invention than it deserved. For our own part, from what we have seen and heard of this experiment, we feel authorized to say that, which

we never felt at liberty to say before, that we are fully satisfied of the great value of the invention. We do not doubt that a certain degree of particularity is required in following the directions that does not belong to some men, and which would deprive them of the benefit of the method, at least to the greatest perfection; so there are some persons, as every physician will tell you, who cannot be induced to administer three successive doses of medicine according to the simplest prescription. But in the hands of any farmer who will strictly follow the method as it is explained in Mr. Bommer's pamphlet, this invention we believe is worth ten times the price at which it is to be obtained.

Mr. Woodfin speaks of the method as being "somewhat troublesome." We wish he had been more explicit on that point: large quantities of water are used in the process, and Mr. Woodfin's heap was so situated as to make the application of this material laborious; but, nine times out of ten, it may be so located, that any quantity of water may be conducted to it with little or no labor at all: we do not know, but think it likely that it was to this portion of the process, that Mr. Woodfin chiefly alludes in the expression quoted.

As to the time required exceeding that specified by Mr. Bommer, it must be remembered that this was the first experiment in a process entirely new, where the operator, without any experience, was compelled to rely wholly upon the printed directions contained in the pamphlet. Mr. Woodfin does not doubt, that, by avoiding an error committed in the first process, the result could be effected in the time required.

If the chemical properties of this compost are what Mr. Woodfin supposes them to be, of which he is much more capable of forming an opinion than we are, if it is indeed superior to stable manure, it is hard to estimate the value of the invention.

POUDRETTE.

We have made considerable sales of this article during the present season, and should be pleased to receive authentic and particular accounts of the result of its application to various crops. We have received some second hand reports of its extraordinary efficacy in pushing forward tobacco plants, but we have obtained no statement, as yet, so reliable as to induce us to publish it. Our columns are of course as open to accounts of failure as success; indeed, we think it is as incumbent upon the purchaser of a new thing to warn the public of its worthlessness, when he has been bit, as it is to herald forth its virtues, when his judgment has been sustained by the result of his purchase. All we ask, is, that in making reports of this or other matters, whether for good or evil, the author will be particular in stating every thing that could by possibility affect the experiment.

We have lately received a letter from the manufacturer of the poudrette, in New York, in which he begs us to urge its value as a top dressing to corn, applied at the first or even second hoeing. He also seems very anxious that its action upon tobacco and cotton, crops with which he is unacquainted, may be fully and fairly tested.

For the Southern Planter.

Mr. Editor,—I have for some time been using an implement of great simplicity and cheapness, with which I am much pleased, for levelling newly ploughed land. It may be made of a common ox-cart tongue, by pinning on across the forked part of it where it rests on the axletree, a piece of timber, about six or seven feet long, six inches thick, and twelve or fourteen inches broad. You will at once see that it is intended to be drawn by a yoke of oxen, but might easily be constructed so as to be adapted to horses. The cost to any of your readers, who may be curious enough to wish to try it, will not exceed fifty cents; as any field hand can, in a few hours, convert the cart tongue into one, without unfitting the tongue for its ordinary use.

W. O. Gregory.

Waterloo, N. C., May 6, 1843.

As we have reason to believe that the root culture is on the increase in Virginia, and as the fly is the foe most dreaded by the grower of rutabaga as well as the common turnip, we publish the following, from the American Agriculturist:

REMEDIES AGAINST THE TURNIP FLY.

As the cultivation of the different kinds of turnip is becoming somewhat extensive in the United States, and wherever adapted to soil and economical feeding, it is a valuable crop, a few hints for their protection against enemies may be useful. The principal danger to the turnip plant is immediately after it appears above the surface of the ground. There are a variety of

insects that feed upon and destroy it, during the first few weeks of its existence; but its most considerable enemy is a small black bug, that seizes upon the tender cotyledons the moment they make their appearance. Where the enemy is not in sufficient force to consume all the young leaflets as they appear, the plant will make a gradual, though slow progress; and when so far advanced as to be able to put forth its larger and more fibrous leaves, it will generally reach maturity. But it must be remembered, that any diminution of its leaves, especially in its early existence, is prejudicial to its growth. The leaves are to plants, what the lungs are to animals, and in nearly all cases they superadd, in no small degree, the functions of the stomach also; for in addition to throwing off a portion of the surplus moisture, oxygen, &c., taken in by the roots, they absorb carbon largely from the carbonic acid of the atmosphere, which becomes fixed in the vegetable as a large proportion of its matured substance. Of course the early leaves of all plants should be protected with the utmost care.

For the protection of the turnip, I have found no more efficacious means than soaking the seed in the *most offensive tanner's oil* for two or three days previous to sowing. This saturates the seed with the repulsive taste and odor, and as the germ which first appears above ground is furnished *exclusively* from the seed, the cotyledons, which are the most exposed to the insect, are charged with a flavor every way adapted to their protection from its ravages. In addition to this great advantage, the oil is one of the most nutritious substances for the support of the young plant, and helps it forward with a rapid growth, by which it sooner gets beyond the reach of danger.

Phosphoric acid in the proportion of one of acid to two of water, forms a steep or soak which gives wonderful acceleration to the growth of plants; soak in this twenty to fifty hours.—Arsenic, in the proportion of one to fifty of water, in which the seed should remain twelve hours, produces astonishing effects on the early growth of vegetation. The effect of this poison on the product cannot be injurious, though the seed soaked should be carefully kept from all living things, and when taken from the steeping vessel immediately buried beyond reach.

After soaking, it can be prepared for sowing, by mixing with plaster, ashes, or air-slacked lime, so intimately mixed, as to obviate any inconvenience from adhesiveness of the seeds.

If the insect is found to pursue the plants afterward, they may be sprinkled with the stale liquid from a tanner's lime-pit. This is most conveniently done with a common watering-pot. If a tannery is not accessible to the farmer, he may easily prepare any desirable quantity of liquid, equally valuable, by collecting stale urine and the strongest drainings from the dung-heap, in large hogsheads, or what is better, in permanent cisterns, which should have a place in every farm-yard, adding lime in proportion to the quantity of liquid. The addition of putrid flesh, fish, &c., will add to its efficacy. A weak brine, diluted sulphuric, or nitric acids (oil of vitriol and aquafortis,) may be sprinkled over the plants with success. Unleached ashes, lime, plaster, and soot, sown broadcast over the plants after a rain, or while the dew is on, are sometimes effectual remedies. In addition to the value of the above applications for killing the insect, they are all directly beneficial in promoting the growth of the plants to the full value of the cost of the material and labor.

Folding sheep on the ground where turnips are to be sown, is an excellent preparation.—New land when it can be had, is admirably adapted for a turnip crop, as it is free from insects, and possesses an abundance of the alkalies, which are every way suited to the rapid growth of the turnip. Burning the rubbish on the land required for this crop is a good precaution, as thereby a portion of the eggs and insects are destroyed. Deep ploughing will exterminate all that are placed so far beneath the surface, as to be unable to reach it again. The use of long manure, or sowing on a stubble-field, are objectionable, as they harbor and protect the insects.

Where enemies are numerous, three or four pounds of seed should be sown in drills, and twice as much more broadcast, which affords more food for the fly, and there may possibly be sufficient left for a crop, after supplying the foragers with all they want; the excess, if any, may be thinned with the cultivator and hoe.—But in all cases the soil should be in good condition, and be prepared with some rich, stimulating manure, such as night-soil or other concentrated aliment, by which the plant will be enabled to push itself rapidly beyond the reach of marauders. Alternating turnips with potatoes, sugar-beet, and other crops in no way related to this family of plants (the cruciferæ,) is useful, by cutting off the supply of food to its enemies, by which it is starved out or compelled to shift its quarters for subsistence.

The frequent use of the cultivator and hoe is beneficial in destroying the insects, besides materially assisting the growth of the plant. All family weeds, colewort, water-cresses, hedge-mustard, and the like, which afford food to the common enemy, should be carefully exterminated; and such other kindred vegetables, as cabbages, cauliflower, mustard, table and horse-radish, &c., should be cultivated remote from the turnip-field, so as to afford no rendezvous for their perpetuation.

R. L. A.

Buffalo, April 25, 1843.

PLEASE NOTICE AND EXCHANGE.

We almost daily observe this endorsement upon some new comer, either political or agricultural. The *exchange* we are always ready to make, because we are seldom, or never, the loser by the bargain, but with every disposition to be courteous and polite, we cannot afford the room that would be required *to notice* the hundreds of papers that are monthly emerging into life. Our sheet is so small, and valuable information in these days of diligent research is so abundant, that we hardly issue a number from which we are not compelled to omit several articles that we would feign have given to our readers. Besides, what does it avail either the Editor or our subscribers, that we should keep, as others do, blank forms standing, in which to insert the name of new papers as they are received—the unmeaning and formal compliment passes for just what it is worth; our courtesy, we hope, is too well known to our readers to permit them to expect any sincerity in our notice of a cotemporary, and our using the common terms of politeness, would be no index of even our opinion. The most delicate and the most sincere compliment that we can pay to any paper consists in the extracts we make from it; and it is by this means that our real appreciation of any work may be discovered.

Still, we would not be so churlish as to find fault with those whose greater space affords them opportunities of indulging in these little amenities, from which we ourselves are excluded, and to which we are so much indebted.

TO STOP BLEEDING AT THE NOSE.

An acquaintance called a few days since to say that one of his family having suffered from a profuse bleeding at the nose, after a fruitless resort to various remedies, some one laughingly suggested that the patient should hold up his left hand, a remedy that had been recommended some where in the newspapers: the suggestion was laughingly adopted, and the effect was no less surprising than satisfactory. Our informant only vouches for the fact that in this case the bleeding ceased after the hand had been held up for about three minutes. Whether the relation of cause and effect exists, or whether it will ever happen again he does not pretend to say.

There are often notions which swim in the head that never sink into the heart.—*Romaine.*

Richmond Markets, June 17, 1843.

Tobacco.—Inspections for a month past have been very heavy, averaging about 225 Hhds. per day, and stocks in the warehouses have accumulated to such an extent that planters have found it impossible to get their crops opened, as brought to market—but the bulk of the crop is now in and this inconvenience will soon be obviated. The tobacco season will close sooner this year than heretofore, and as the market has borne their heavy sales without showing any decline in prices, we do not expect to see them laxen throughout the season, and think that fine shipping and manufacturing qualities may advance still higher. It is too early to form any correct conclusions in regard to the next crop, but as very little has yet been planted, it must be a late one, and may suffer from various causes on that account. We quote lugs $2 25 a $2 75 and $3—leaf, common $3 a $3 75—middling $4 a $5 50 and good $5 50 a $6 50—fine stemming and shipping $7 a $12—fine manufacturing $12 a $15.

Flour.—Canal $4 75 a $5.

Corn—56 a 60 cents per bushel.

Oats—From depot 33 a 36 cents per bushel.

Exchange on North ¼ a ½.

Ludlam, Preston & Co.

CONTENTS OF NO. VII.

Roots—Culture of, recommended, p. 145.
Poor Land—Cheaper to improve old land than to clear new, p. 145.
Coal-Tar—A nuisance, p. 146.
Rotation—Recommended, by J. Du Val, p. 147.
Sassafras—To extirpate, p. 147.
Rust—To preserve tools from rust, p. 147.
Steam Generator—Bentley's described, with a cut, p. 148.
Improvement—A plan of, recommended, p. 149.
Manures—Proper management of, p. 150.
Green Crops—When to be turned in for improvement, p. 150.
Mud—How to be treated as a manure, p. 151.
Lime—How it should be applied, p. 151.
Salt—Its value as a manure, p. 151.
Sweet Potatoes—Directions for keeping, p. 152.
Exhibition of the Henrico Agricultural Society—Some account of, p. 153.
Sponge—To soften and preserve, p. 154.
Looking Glasses—To clean, p. 155.
Furniture—To keep it clean, p. 155.
Hinge—A description of a cheap one, with a cut, p. 155.
Fencing—Directions for constructing, p. 156.
Plaster—Directions for using, p. 156.
Corn—Remarks on the cultivation of, p. 157.
Comments—On the May and June numbers, p. 157.
Kentucky Blue Grass—Remarks on, p. 158.
Soiling—Economy of, p. 159.
Farmer's Encyclopedia—p. 160.
Draining—Plan of covered drains, p. 161.
Ploughing Match—Proposition for, p. 162.
Hay Making—Directions for curing and managing hay, p. 162.
Hill Side Ploughs—M'Cormick's, with a cut, p. 163.
Delinquent Subscribers—Hint to, p. 164.
Bommer's Manure—Further notice of, p. 165.
Poudrette—Recommended for tobacco, p. 166.
Leveller—Description of an implement for levelling ploughed ground, p. 166.
Turnip Fly—To prevent its ravages, p. 166.
Original Communications—False estimate of, p. 168.
Bleeding at the Nose—To stop, p. 168.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS, Editor.

VOL. III. RICHMOND, AUGUST, 1843. No. 8.

RUST PREVENTED BY THE USE OF ASHES.

One of the chief constituents of the stalks of plants is *silica*, which is neither more nor less than the pure earth of the common *flint*; the quantity varies with the nature of the plant; in some, as in wheat especially, it is apparent in the glazed appearance of the stalk to the most common observation. Upon this circumstance, Mr. Levi Bartlett has built up the following ingenious theory. For want of a sufficient quantity of silica, the straw of wheat grows up soft and tender; the more rank and luxuriant it is made by manure, the smaller will be the portion of this hardening property falling to each stalk of grain; then it is, that it falls, or *lodges*; if there happens to be a day or two of warm, moist weather about the time the wheat is in milk, the rush of sap is so great, that it ruptures the *tender* and *inefficient* coating in the stalk; the sap vessels burst: the sap exudes, and forms a coat of RUST, and the crop is nearly ruined.

The silica in the shape of sand, quartz, &c. Mr. Bartlett admits, is generally present in sufficient quantities in the soil; but he thinks, to be useful, it must be soluble, which, he says, can be effected only by an alkali. For this purpose he recommends the use of *potash*, and it is to this action, that he ascribes chiefly the advantages of using ashes as a manure.

That this is the effect of potash upon silica, Mr. Bartlett infers from the fact, that lye will dissolve the silica in wood. From this well known circumstance, tubs for leached ashes are usually made of pine, which does not contain so much silica as oak, and which is, therefore, less affected by the potash. An oak tub after having been used a few times for a leach tub, would have its silica dissolved, and the staves if dried, would shrink to half their width.

That ashes is beneficial to the crop in thus liberating the silica of the soil is a new and ingenious, and we will add, a plausible doctrine. Liebig recommends also the use of ashes but he offers a different exposition of the *modus operandi*. He too, conceives the silica to be frequently wanting in soils which have been long cultivated in wheat, but it is in the form of a *silicate of potash* that he supposes it to be furnished directly by the ashes. So far, however, they both agree, that soils often fail in wheat for want of something that is furnished by the ashes.—But that *rust* proceeds from the want of the indurating quality in the straw afforded by the silica, is, as far as we know, entirely original with Mr. Bartlett. This is a most important point, and one worthy of the deepest attention; there is a plausibility about the doctrine that entitles it to investigation. If ashes alone is wanting, and, as is suggested, in very small quantities, it may be obtained by paring and burning the soil, from wood, and various sources, in quantities sufficient for the largest field. Save us from the fly and rust, and there is no crop that is so dear to a Virginia farmer as his wheat; in spite of these malignant enemies, there is none likely to supplant it in his affections. The labor of cultivation is so light, compared with either corn or tobacco, and it comes in so conveniently to fill the gap between the finishing of the spring crop and the closing in of winter; besides, our habits and customs, our experience, and the establishment of our manufacturing mills, all make the wheat an indispensable crop with us. Any thing, therefore, that promises to rid us of one of the sore evils which annually threaten the hopes of the husbandman, will attract attention and secure consideration.

This want of stamina Mr. Bartlett thinks is not peculiar to the straw of the wheat. It is not uncommon, he says, to see a piece of land receiving the wash of a barn putting forth a luxuriant growth of grass early in the spring, the freshness and vigor of which gives promise of a goodly crop; but for the want of stamina, owing to the deficiency of soluble silica in the soil, it falls before it heads, and when made into hay, the weight is light in proportion to the bulk.

Are these ingenious presumptions correct?—

They are to be tested only by facts, and we respectfully invite our correspondents to furnish us with circumstances coming within their observation that have a tendency to shed any light upon the subject.

Will common observation or chemical analysis detect the want of silica in the straw of wheat that falls or rusts? Will not somebody institute a set of experiments to ascertain whether ashes afford protection from rust?

If rust proceeds from a deficiency of soluble silica in the soil, the thicker and more luxuriant the growth, the greater should be the liability to rust: is this so? On the contrary, we know one farmer at least, and a good one too, that thinks high cultivation and heavy manuring a perfect preventive of all the ills that wheat is heir to. He thinks, that the thinner his wheat, and the poorer his ground, the more likely he is to suffer from rust; because, he considers, that animal and vegetable manures thicken and strengthen the stem so as to enable it to resist the additional strain arising from the increased flow of the sap during a *rusty* spell.

We were discussing this theory a few days since with an intelligent and scientific farmer from the county of Louisa, who seemed much struck with its plausibility; he mentioned a circumstance that certainly has a tendency, as far as it goes, to confirm the doctrine. There is a portion of the Green Spring country he says that is notoriously and proverbially invulnerable to rust, and he well remembers, that during a visit to the neighborhood, a few summers since, Professor Rogers analyzed the soil of this section and pronounced it, amongst other things, remarkable for the potash it contained.

To the consideration of this question we invite the inquiring mind of Professor Rogers.—There is no field of investigation more worthy his scientific abilities. If by his patient research and penetrating acumen he can discover the cause, and provide a remedy for this sore evil under which our husbandmen are groaning, he will win for his brows a wreath more honorable than ever adorned the temples of a military hero.

For the Southern Planter.

WHEAT, PLASTER, POTATOES.

Mr. Botts,—Having seen it recommended to sow old wheat instead of new, as a preventive against the ravages of the Hessian fly, in the fall of 1841, I reserved two and a half bushels of good seed wheat, and in October, 1842, sowed in a belt through my field, sowing on either side, and putting in, similarly, wheat of the same kind, though the growth of 1842. I have seen no difference up to this time in the appearance of the crop. I have now a few bushels of seed wheat, the growth of 1842, and will repeat the experiment this fall, as a different result may follow in another season.

Whilst writing, I will state that in the spring of 1842, I made five different experiments on the application of plaster to corn, upon as many varieties of soil, to test its relative value and efficacy, intending to gather accurately and report the result. I was prevented from doing this by the severe storm and fresh we had in September, which flooded some of the corn, and blew down and intermixed the rest, so as to render impossible an accurate admeasurement. I can only state the general facts, and appearance of the crop during the season. The first experiment was upon a gray gravelly soil—the second, upon red land, intermixed with fine chocolate gravel—both high land. The third, was a poor sandy soil; fourth, rich sandy loam; fifth, rich, moist, black stiff land, such as we find upon most of our flats, where they approach the hills. The three last, flat land. The corn was simply rolled in plaster as long as any would stick. In each experiment six rows were taken, leaving three rows unplastered alternating with the plastered corn. The greatest improvement from the plaster manifested itself in the third experiment upon the poor sandy land.—The contrast here was so great that a sensible neighbor of mine could scarcely credit that plaster alone had been applied. The next greatest improvement was to be seen in the fourth experiment upon the sandy loam. Then came the first and second experiments, in which there seemed but little difference as to their relative improvement, but manifest superiority over the alternating rows of unplastered corn. In the fifth experiment, some time after the corn came up and whilst the weather was dry, I could perceive a superiority of the plastered over the unplastered rows. The weather then set in wet, and by the time the corn was in tassel I could perceive no difference, nor do I believe the yield varied. The season was a dripping one and unpropitious to the fullest exhibit of the application of plaster, which shows more distinctly in dry seasons—nevertheless, the plastered corn in the four experiments maintained its superiority over the parallel rows of unplastered corn through the season.

I will state the result of an experiment made by a friend of mine, Col. R. Taylor, of Orange, upon light, red, mountain land. He left four rows of corn unplastered. They ran around a hill near its base, upon land evidently better than that over which four rows above them

passed. From the unplastered rows he gathered eight hampers of corn—from the plastered rows thirteen.

A short time since I extracted the following memorandum from the diary of Mr. C. P. Howard, residing in the vicinity of Orange Court House, who was induced to make the experiment from seeing it recommended in some agricultural work: "Planted potatoes in garden 22d March, 1842, cut off the bloom and buttons as they formed, of two rows; dug them on the 10th August. The two rows measured three bushels and a half peck. The two adjoining rows two bushels and three pecks, which were smaller in size."

Respectfully,

GEO. A. SMITH.

BEE HIVES.

We have been requested by a subscriber to give our readers some information upon the comparative merits of different bee hives. Will some friend do us the favor to supply what our want of information precludes us from doing?

For the Southern Planter.

REPORT OF THE MECKLENBURG CLUB.

The following report was read before the Upper Corner Agricultural Club of Mecklenburg, on Saturday, the 16th instant, and ordered to be transmitted to the Editor of the *Southern Planter* with the request that he publish it in that journal:

The Committee appointed at the last meeting to report upon the farm of Dr. Paul C. Venable, have performed that duty, and report, that his farm in every part, evinced great diligence and personal attention. The homestead is tastefully and substantially built, with all the necessary farm buildings well arranged; a young and thriving orchard, good garden, &c. &c. But the improved condition of the farm at large, more particularly arrested the attention of the Committee. The whole is laid out in separate shifts, with good enclosures and gates, and every field, except those in immediate cultivation, well set with herdsgrass or clover; with a beautiful highland meadow of some eighty or a hundred acres. Your Committee have rarely seen, even in a strictly grazing country, a richer and more beautiful display of the artificial grasses. The corn-field, was well prepared and planted, and although recently covered with a strong herdsgrass turf, gave promise of an abundant crop, provided, the future cultivation was of the same efficient character with the preparation, and bestowed in time. The tobacco land was in a course of preparation; it seemed to be very highly manured and well got up. The Committee were highly pleased with the exhibition of farm stock, particularly the cattle and sheep. The Doctor has for some years, turned his attention to raising blood stock. His noble bull, Lord Durham, of the short horned breed, is of pure blood, a truly splendid animal, and of a size and figure that ought to excite his neighbors to avail themselves of his vicinity, to improve their own cattle. His whole stock of cattle show blood and breeding, and in consequence of his attention to this subject, his family enjoy abundantly the substantial comforts of milk, butter, beef and mutton; for he is successful in raising sheep as well as cattle, and raises both to a considerable extent, for market. He entertains the opinion that the artificial grasses and free grazing are essential to rapid and extensive improvement of the land; and the rapid progress which he has made in the improvement of his own estate, should entitle this opinion to much weight with the Club. One member of your Committee has been for many years familiar with the character of the Doctor's plantation, and testifies to the fact, that up to the time when it came into his hands, it was a barren waste in comparison with its present improved appearance, and both members of the Committee bear testimony to its rapid improvement since it became his property, some eight or nine years ago. He pursues what he expressively terms *a progressive system of improvement.* That is, he changes the scene of his manuring operations every year, and devotes every possible amount of time and labor that can be spared from his other farm work to increasing the quantity of manure, and he is thus enabled to bring the poorest spot to tobacco heart at the first manuring, and he purposes to pursue this mode until he shall have gone over his whole arable surface, which he hopes to effect in a few years more. He is very partial to the moveable summer cow-pens, and owing to his large stock of cattle and their rich and abundant grazing, he is able to go over an extensive surface every summer. The Doctor exhibited a Merino and a Saxon buck, both fine looking, and a fine large and healthy flock of ewes and lambs. He ascribes his success in sheep raising, mainly, after the abundant grazing, to a rule he has adopted of never suffering old sheep to remain in his flock; to avoid which, he annually, at shearing time, makes a short slit with the shears in the ear of the sheep, and after the number of four slits, the animal is doomed to the slaughter-pen, before next shearing time.

Your Committee has thus briefly adverted to the principal features of the Doctor's management, which they would recommend to the attention and imitation of the Club. There are, however, some matters of minor importance well worthy of note, such, for instance, as the

fish pond, to which our attention was called.—Every good husband endeavors to aid his wife in her laudable efforts to stock the poultry-yard by building suitable houses, enclosures, &c. to facilitate that object, and we all know how necessary this is towards keeping a good table.—Not less so is the resource found in the fish-pond, which is perhaps more profitable even than the poultry, as it is a well ascertained fact that a small pond well stocked, will supply a good dish of fish at every season throughout the year, while it affords a healthy and innocent recreation for our families. Almost every planter can afford himself this comfort, by erecting a dam across his spring branch, which will serve also as an ice pond, now considered an indispensable appurtenance to every farm.

Another valuable feature in the Doctor's practice is the procuring a good spring for his stock and laborers, in almost every situation, where an ooze or springy spot is found on the farm, by excavating deeply, and fixing in a plank box of commensurate depth, to convey the water to the surface; thus in many instances converting foul and stinking bogs or mires, into wholesome springs, and rendering the land about them arable and productive.

Your Committee have thus noticed such things as seemed to them to claim commendation and approval. There were no exhibitions of the *corn-crib*, the *forage-house*, the hay or oat-stacks, nor had the committee access to any statistics, to show the amount of the Doctor's crops, or what proportion his nett profits bear to his improvements. Of the improvements, our Club as well as your Committee, must bear willing testimony. But these questions are well worthy of investigation and solution, that is, whether the sum of the profits is as the sum of the improvements? and whether the increased labor of cultivating these large fields of grass, when they are brought to the hoe crop, as they must be soon or late, does not more than counterbalance the advantages? Questions, which the Committee leave to the Doctor's own future experience and the better judgments of the Club.

Where there is so much to approve and admire, the Committee would willingly refrain from finding fault, but we should not perform more than half our duty were we to omit this express requisition of our rules. We would say then, to the Doctor, that we think he generally cultivates too much land for his force, under the system he is pursuing—that the extensive cultivation of the grasses greatly increases the labor of the hoe crop, and that if he would diminish his arable surface in proportion as he increases his grass and his manured surface, his products would be greatly enhanced; that he would be able to carry on his schemes of manuring more extensively and successfully; that he would not be in danger of acquiring the distinction of having two blades of grass in his corn-field where one ought not to be, and that when the future meetings of the Club are held at "*Wheatland*," he will have the pleasure of showing what the Club with equal pleasure will behold—the *corn-crib* and the *forage-house* teeming with corn, &c. as his cows now teem with milk, and the sheep with their ample fleeces.

All which is respectfully submitted.

A. C. MORTON.
H. L. JEFFRIES.

We take the liberty of considering ourselves, *ex officio*, a member of every agricultural club in the State of Virginia, and as such, we exercise our privilege of commenting upon the reports made by *our* committees. We think we detect in this report the attempt to poke a little good natured fun at Dr. Venable on account of a suspected vacuity in his corn-crib. Now, we are highly pleased with the system pursued by the Doctor, and do not perceive the relation of cause and effect between that system and an empty corn-crib, and we see no fair ground for the inference of the Committee. There was no exhibition of the corn-crib, but there was an exhibition of stock, in such order as to call forth the warmest admiration of the Committee. Is there any one of those gentlemen that can produce a similar result with an *empty* corn-crib? If so, it only proves that grass, so far as stock is concerned, may be advantageously substituted for corn. When the mother of the Gracchi was asked for her jewels, she pointed to her children; when the Doctor is asked for his corn-crib, he may point to his cattle and his sheep.

We feel bound to defend the grazing system which has excited the raillery of the Committee, because we have recommended it heretofore, and because we believe that to it Virginia is yet to be indebted for the greatest agricultural blessings. We confess we have been a little amused at the exhibition in the Committee of that principle so peculiarly characteristic of our Southern people, which inclines us to cling so tenaciously to the customs of our fathers, even in spite of our better judgment. It is an amiable weakness, and one that we should dislike to see wholly eradicated; but a little modification of it would sometimes probably enure to our benefit. This Committee visit the Doctor's farm and find a new system which substitutes grass and cattle for grain, in full operation.—The garden, the orchard, the character and

keep of the stock, elicit their warmest admiration, and the improvement in the soil is truly astonishing; and yet they evidently more than doubt the benefit of the system which has lead to these results.

In a particular county in this State it has been the custom, it is said, from time immemorial, to keep a large stone on every farm, which is put in one end of the bag when it is sent to mill to balance the corn or meal in the other end. A benevolent traveller meeting the mill boy once with his horse thus encumbered, suggested to the little fellow the advantage of dispensing with the stone, and dividing the corn. With all the pliancy of youth, the boy took to the innovation, and determined to try the experiment; delighted with the result, he hastened to inform his father of the wonderful discovery, and to prove by ocular demonstration the advantage of the riddance, in which old Dobbin seemed to rejoice. The old man admitted that the new theory *looked* plausible, "but, my son," says he, shaking his head, "let us beware of new-fangled notions; go back and bring home that stone, and remember that it is dangerous to attempt to be wiser than our fathers." To this day, in that county, the corn goes to mill in one end of the bag, and the stone in the other.

The Committee doubt whether the improvement is worth what it cost. A "barren waste," be it remembered, by means of grass and cattle, has been in a few years converted into the beautiful farm so glowingly described by the Committee. Could the same result have been effected in any cheaper mode? None is pointed out, and surely the Committee do not mean to doubt the value of *any* improvement? But the Committee fear that the young grass will trouble the Doctor in his corn crop. We do not doubt that if the Doctor manures highly, and turns under a heavy sod of artificial grass on which to plant his corn, he will be infinitely more *troubled* both with grass and *corn* than he would have been if he had left his land in the state in which he found it; but we hope he will permit the fear of the excess of neither the one nor the other to delay him in his system of improvements.

There is reason even in the roasting of an egg, and we do not mean that pasturage may not be substituted for tillage to too great an extent; but we do mean to express the opinion that an excess of tillage, to the exclusion of pasturage, has skinned our lands, and that to the reverse of that system we are mainly to look for improvement.

We hope that the Mecklenburg Club will admit our claim to fellowship, and excuse the freedom we, have exercised in commenting on the report of their Committee; it is in many respects a very valuable one; especially, would we invite attention to their well-timed remarks upon the Doctor's *fish-pond.*

PRESERVING EGGS.

It would be quite a valuable discovery to farmers in the neighborhood of a large market, as well as to household economy, if a cheap and easy method of preserving eggs could be practised, whereby the price would be more equalized through the various seasons of the year.—Reaumer, the inventor of the thermometer which bears his name, tried many experiments for this purpose, and found that the cheapest and most effectual method was to apply oil or grease, with which they were rubbed, or into which they were dipped. He found that they were preserved quite as well by the thinnest layer of fat, as by the thickest coating, so that every part of the shell, (which is porous and admits air,) was covered. All sorts of fat, grease or oil, he found well adapted to preserve eggs, and kept them in this way, he says, for nine months, as fresh and good as the day they were laid.—Will some of our readers try a few dozen in this way, and let us know the result?

Newburyport Herald.

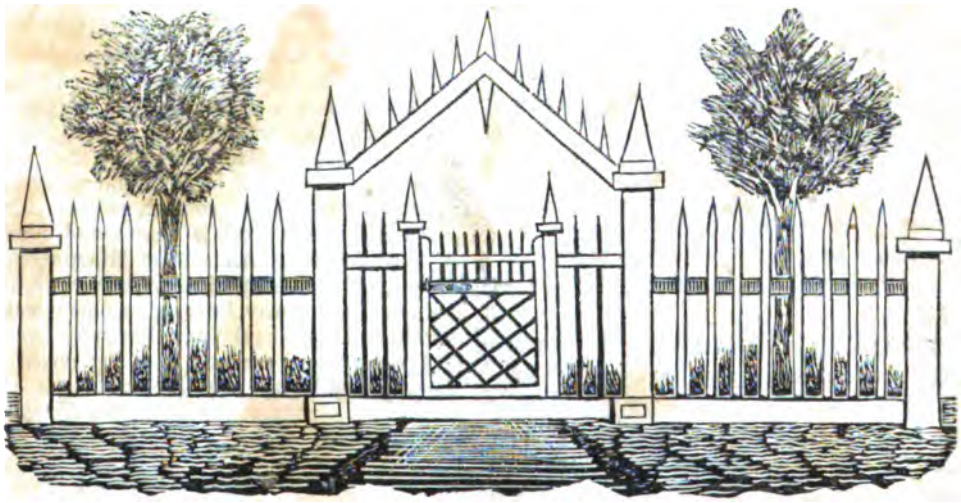
From the Cheraw Gazette.

THE TOMATO.

Few people have any idea of the great value of this very common and easily cultivated plant, although there are still fewer, perhaps, especially in the South, but who esteem it one of the most pleasant and useful of vegetables.—The ease with which it is raised is no inconsiderable recommendation, and its medicinal qualities render it still more valuable. As a preserve, the tomato has few superiors in the vegetable kingdom, and it is an excellent substitute for the fig, which, when dried and packed in boxes, it very much resembles in many particulars; while the ketchup from tomatoes is known and approved by the *gourmand* everywhere.—There are three varieties of fruit—the large common, the egg, and the golden drop—the two latter of which are the most highly esteemed for their delicious flavor. The soil in which tomatoes are planted should not be very rich, or they will run too much to vine; how-

ever, we presume it is unnecessary to give any caution on this head. But what we intended more particularly to recommend, when we commenced this article, but which we had very nearly lost sight of, was, the great value of the vine of the tomato as food for cattle, especially cows. We have tried the experiment, and believe it can be proved to a demonstration, that a cow fed on tomato vines, will give more milk, yield butter of finer flavor, and, in greater abundance, than on any other *long* feed we have ever tried. We have heretofore only used it in small quantities from our garden, but intend this year, should God grant us health and strength, to experiment more largely, as we do not entertain a doubt but that *more* food for cattle, and of *better* quality, can be raised from a given portion of ground, and at *less* expense, when planted in tomatoes, than any other vegetable known in the Southern country. This is our opinion, but if we are wrong, having experimented, as we before observed, on a very small scale, we are open to conviction, and will cheerfully publish any communication shedding light upon this or any other subject connected with the interests of the agriculturist.

YARD ENCLOSURE.



There is nothing more ornamental or more necessary to the comfort of the homestead than a good enclosure about the yard. A straggling fence can only be tolerated by an individual totally wanting in taste and refinement, who is utterly unconscious of the thousand comforts and innocent pleasures that a cultivated mind can form for itself out of the simplest and cheapest materials. It is from these simple and elegant pleasures that civilized life derives its greatest charm; they constitute the great sum total of human happiness; without them civilization would be the most arrant humbug upon the face of the earth: in quitting a state of nature, we gave up much to attain them; and the man, who asks what is the use of this elegance, or that refinement, and who can see no value in any thing that does not directly fill his money bags, is a kind of demi-savage, suffering all the evils, without enjoying any of the blessings, of civilization.

The engraving represents a pretty and cheap method of enclosure taken from the "Cultivator," and we introduce it with these remarks, because, we know that too many are inclined to despatch such things with the passing remark, that "they may do very well for those that have a plenty of money, but that they are of no manner of *use*." We should like to know of what use is money itself, but to procure the pleasures and comforts of life, and yet many a man will toil for *money*, whilst he neglects those comforts which can be obtained *directly* at much less expense of labor. Besides, not only are these neat and elegant arrangements about the homestead productive of the purest pleasure,

but they are *useful* in imparting a tone of order and system to the general conduct of the farm, that is highly advantageous to the quantity of its products. A neat enclosure, a clean yard, a tasteful display of flowers, a freshly painted dwelling, will, by the force of example, impart a spirit of neatness and order that will be manifest in the humblest negro on the plantation.

To those, then, who are impressed with the value of such things, we give this illustration of an enclosure, the construction of which may afford a delightful recreation to any gentleman who is not ashamed to handle a saw and a hammer. "The gate posts are 10 feet long, 10 inches square, and set 3 feet into the ground, with a bed piece between, into which the inner posts are mortised. The fence posts are 4 feet long, 10 inches square, and made of 1½ inch plank, well spiked together. A long stone is set solid in the ground, the hollow post placed over it, and the cavity between the stone and the inside of the post filled with pebbles. I know of posts set in this manner which have lasted ten years, and continue as firm as ever."

For the Southern Planter.

MANAGEMENT OF SERVANTS.

Mr. Editor,—The management and conduct of servants in a family, especially about a house, has been a source of much trouble and vexation to the housekeeper or manager; and to an observing person, the turmoil and labor of the mistress of a family, in the management of her servants seem to warrant the conclusion, that the trouble of housekeeping more than counterbalances the comforts and enjoyments procured by the labors of her domestics. Indeed, very few Virginia ladies, comparatively speaking, are brought up in a way calculated to make them what we would call *good managers*. Now what I want to suggest, is, the propriety of adopting the following advice.

First, let me remark, that most servants are incapable of understanding the explanation of any thing which they cannot *see* with their *eyes*; therefore it is useless to tell them to do any thing which requires a long explanation, or which they are not daily accustomed to do. It is by far the best plan, to allot to each his particular duties, and to have their affairs so arranged that one will not be dependant on another. Let not more than one be employed about the same thing; for if there is more than one, they will depend on each other; and, moreover, one can do more work than two or three if they are employed closely together; probably some will not believe this, but let them try it.

Never change your servants from one line of business to another, for it takes them some time to get into the habit of doing things regularly. Be always as concise as possible in giving orders; for servants cannot retain many things in their heads at one time. Never scold when a servant neglects his duty, but *always* punish him, no matter how mildly, for mild treatment is the best; severity hardens them. Be firm in this, that no neglect go unpunished. Never let a servant say to you, "*I forgot it.*" That sentence, so often used, is no excuse at all. Finally, let regularity mark every action, and the consequence will be, that every thing will be done in its right place and at its right time; and the comforts and happiness of the family will be secured.

CECILIA.

We set our fair correspondent down as a tip top manager, and if we ever visit her section of country, as we hope one day to do, we shall carry with us her "card," that we may partake of that hospitality, which her system so surely enables her quietly and sweetly to dispense to her friends and neighbors. But it is not in that important department, the household, alone, that "management" is required. One of the most important, but least regarded, points in the conduct of any business requiring the manual labor of others, is the control and management of dependants. In a manufacturing business, where numerous operatives are employed, (and such a business is farming) no one who has not tried it can imagine the difference in the amount of product to be effected by order and system. Though human ingenuity, in the shape of labor-saving machinery, has done much, the reduction in the price of manufactured goods is chiefly to be attributed to the division of labor, by which one task is regularly and daily repeated by one individual. This system, as far as possible, should be introduced into our farming operations. We know an individual in this city, who, if he was as well versed in the science of agriculture as he is in the mechanical art to which he was raised, would be worth his weight in gold to any farmer in Virginia: sagacious and thoughtful, he is ever on the alert to accomplish his ends in the best and most economical manner; calm and dispassionate, but firm and active, the operatives under his charge know that punishment will certainly follow disobedience, and the consequence is, that, comparatively speaking, there is no disobedience and no punishment.—His nature is especially kind and gentle, and he

says he punishes the first fault to save him from the necessity of inflicting ten times as much, which would be the necessary consequence of the omission. As he is unflinching in punishing a disobedience of his orders, so is he especially particular that his commands shall be explicitly defined, that they may be clearly understood. The great object, he affirms, is to separate the mental from the manual labor; so that the superintendent may do the one, and the operative the other. No laborer should have his attention distracted or his time occupied in thinking what he shall do next; the process of thought and arrangement should devolve wholly upon the superintendent, and the manual laborer, to be most effective, should, by constant repetition, perform mechanically, and almost without the effort of thought, his daily task. It is by this system, that, that degree of intellect, which alone can be obtained from the great mass, is rendered sufficient to the accomplishment of the greatest and most complicated effects. But to do all the thinking for fifty individuals requires no common power of intellect, and, consequently, it is not every stupid fellow that can make a good manager. The *gentleman* that we have described, for although born in an humble station and a self made man, he is in every respect worthy the title, is a highly informed and well read man; otherwise, he could never have attained his acknowledged excellence in so simple a matter, as some would esteem it, of conducting a small manufacturing establishment. Such a man, we verily believe, could go upon any farm in Virginia, and treble the products, solely by the discipline and system he would carry with him.

From the Tennessee Agriculturist.

SOAP MAKING.

As soap making is a matter of no small interest to every house keeper, a few suggestions on the process of manufacturing will be of utility. Soap, as every one knows, is made of alkali and fat or oil of almost any kind. Although grease and lye are common in every kitchen, yet few can combine them with accuracy; and frequently much more labor is bestowed, than is necessary. The first consideration is the obtaining a sufficient quantity of alkali. This requires good wood, green is best, and if it be cut in the winter or while the sap is down, the lye will be much stronger. Old rotten wood should not be burnt when the ashes are to be used for lye.

The ashes being ready, put them into a hogshead, barrel or old fashioned hopper, and put on water till the strength is exhausted. Next commence boiling to evaporate the water, and concentrate the potash. To be assured there is enough potash, make a trial with an egg. If the egg is supported, all is right, but if it sinks to the bottom, the boiling must be continued.

But often it occurs that the *lye* is sufficiently strong and yet soap cannot be made. This is generally owing to the fact, that the potash of the lye is not sufficiently caustic, or capable of corroding the skin. This lack of causticity is owing to the existence of too much *carbonic acid*, in combination with the potash. To prevent this, use the ashes fresh, or before the acid is absorbed. The cure for the evil is quick lime. It has a greater affinity for carbonic acid than potash, and if a half bushel unslaked lime be placed at the bottom of the hogshead of ashes, the lye will be free from the acid. The proper causticity will be shown by dipping a feather into the lye, while boiling. If the more delicate parts are consumed, the lye is ready for the oil. The fat should be as clean as possible. The proportion of fat should be about three pounds to one gallon of the alkali. The fat of course is to be put in while boiling and the whole should be constantly stirred, till the soap is finished.

Hard Soap is made by adding salt to soft soap while boiling. Tallow soap is perhaps the best, but too expensive for common use. The Windsor soap is made of tallow and potash, scented with caraway seed. Butter, lard and the finer oils are used for making the fancy toilet soaps.

T. F.

HESSIAN FLY.

In the last number of the American Farmer, we find a communication from Mr. SAMUEL MCKENNEY, of Georgetown, D. C., advancing a doctrine somewhat striking and original. He contends that the insect found in vegetable productions, as the fly in wheat, the worm in the garden pea, and the maggot in the chesnut, are not, as has been supposed by naturalists, the growth of the egg deposited by the parent fly in the embryo seed, but are the immediate result of vegetable action; that animal, as well as vegetable life and growth, is the result of vegetation; that the two principles are always present, and that the perfection of the grain depends upon the *proportion* in which they exist; which proportion is modified by weather, climate, soil, &c.

Mr. McKenney puts his case very boldly and strongly, and startling as his doctrine is, he sup-

ports it very ingeniously. He puts some tough questions to the *eggists;* whatever they may have been *imagined* to have done, he denies that any insect in nature has been *seen*, guilty of the gross absurdity of poking its bill into the bur of a chesnut, for the purpose of laying its egg in the embryo fruit; in short, he seems to think that the king was not more puzzled to imagine how the apple got in the dumpling, than his opponents will be to explain the introduction of the egg in the grain. For our own part, we candidly confess it was always a mystery to us, and one of those kind of things that, without understanding, we have been in the habit of believing, upon the faith of other men's assertions. If the thing is as ridiculous as Mr. McKenney seems to suppose it, in spite of its antiquity and authority, we shall gladly see it exploded.

The practical deduction that Mr. McKenney draws from the supposition, that the insect is the product of the vegetable growth, is, that there is no means of avoiding its ravages, but by high manuring and superior tillage, which, in spite of season and weather, may push the vegetable fibre beyond the degree of tenderness required to satisfy the delicate appetite of the little epicure, who is then driven to the tender shoots of the young grass, with which he is surrounded.

If our readers only knew how many *theories* we have to pore over, not one in a hundred of which, after all the sifting, is worth even the condensation we have bestowed on this, they could then form some idea of how little of an editor's labors is apparent upon the face of his work.

TIME FOR CUTTING TIMBER.

Many persons finding that timber cut in the spring is not durable, have been careful to cut at a season as far from that as possible, and acting on this principle, the fall or first of the winter has been fixed upon as a good time for this purpose. But so far as experiments have been made, they generally show that June is the best time for cutting timber, provided the bark be taken off, and this can be done conveniently at this season. In June the sap is passing into the leaves, and after becoming elaborated into suitable juices for the forming of wood, it is returning and forming a new layer of wood between the wood and bark. This sap causes a rapid decay of wood if the bark remain on, but when the bark is taken off the wood seasons very fast, and as the sap has been constantly passing into the leaves, there will be but little in the wood to cause its decay.

A "Jack at all trades" who had used timber for more than twenty years, for various purposes, which had been cut at different seasons, remarked that timber cut in June was harder, heavier, and more durable than that cut at any other season. When the tree is in its greatest vigor the sap is thin and rapidly passing through the wood, and if the tree be then cut and peeled, the sap will readily escape through the pores of the wood. But in the winter and spring, the sap contained in the tree is thick, having been prepared the previous year and reserved to commence the new growth. This thick sap will not so readily escape, but remains stagnant in the timber and becomes the principle of its destruction.

A gentleman who has been considerably engaged in ship building informed us that he had used in the same vessel, timber cut at different seasons, and that cut in June was the most durable. Numerous experiments in cutting timber for ships and other purposes show the same results.—*Boston Cultivator.*

BUTTER.

There is no article of provision with which our market is so poorly supplied as that most necessary condiment, *good butter*. In the production of the good things of life, our country people generally excel, but in this most important one, with a few exceptions, we entirely fail. And to such an extent does this failure exist, that a great many have never seen, and do not know what good butter is. We have known many a neat and tidy housewife, an excellent provider too, pride herself upon her butter, which, in comparison with some that may be had from Northern dairies, was not fit to feed a dog upon. Such stuff as is sold in the Richmond market at this time for twenty-five cents a pound, would not bring, in Philadelphia, more than nine or ten: much of it would hardly be thought good enough to grease a cart-wheel.—We can assure our readers that we do not exaggerate this matter, and if they could only taste the sweet, rich, and marrowy butter that can be had in the Northern and Eastern markets for seventeen cents a pound, they would ever afterwards appreciate as it deserves the miserable grease they have been accustomed to dignify with the name of butter.

A few days since, we happened to meet with an article in a celebrated grocery of this city,

from the mountains of Virginia, twelve months old, fully equal to any it had ever been our good fortune to encounter anywhere. We did not fail to avail ourselves of the opportunity to lay in a large supply for family use, and so superior did we find the flavor and consistency of this to the best of the fresh butter which is brought daily to our market house from the surrounding country, that we applied for the name of the maker, that we might obtain for general use the process by which its superior excellence was obtained. The grocer refused to gratify us; "for," says he, "if the individual was aware how little of such butter comes to the Richmond market, and the estimation in which his product is held, my customers would have to pay two prices for it." We then asked what quantity of such butter could be sold in this market; his reply was, "I myself will contract for ten thousand pounds of such butter annually, at twenty cents a pound. Now, to this circumstance we would wish particularly to call the attention of Northern dairymen; they who think they are doing well to get fifteen cents a pound for their butter. Our lands are better and cheaper, our climate more favorable, and our market higher than any they have been accustomed to, and we doubt if in the Union there is an opening for a better business, than a well conducted dairy establishment at the foot of the Southwest mountains, in Virginia, would afford. We have been too much accustomed, in this part of the world, to overlook what are called "little matters:" with even those who sell most butter, the manufacture is, at best, a secondary thing, and an almost unimportant item in their products. Such a thing as a dairy establishment proper, is not, to the best of our knowledge and belief, to be found in the State.

The art of butter making is one requiring a good deal of skill and attention; that is, there are ten ways of making bad butter to one of making good; and if done at random, there are, of course, nine chances to one against the production of the good article. We have, therefore, taken great pains to give our readers all the authentic information upon this subject that we could obtain, and we now append some remarks from an English paper, the "New Farmers' Journal," that we consider worthy of attention.

There are already to be found in the Planter views and opinions upon this subject very much opposed to the common practice of the country; are they right or wrong? We receive communications upon almost every other subject connected with rural economy, but nobody ever says a word about *butter*. Will not some good housewife take up this question, and tell us, of the many methods recommended, which is the best?

The following is the English article to which we alluded:

HIGHLAND AND AGRICULTURAL SOCIETY OF SCOTLAND.—The monthly meeting was held on Wednesday, the 1st inst., Sir Geo. Macpherson Grant in the chair. The first paper, entitled "Experiments and Observations on the Production of Butter," by Professor Traill, was read by the author. These experiments were made in connection with the late Dr. Gerard, of Liverpool, who had paid much attention to the subject, and assistance was occasionally given by Dr. Bostock, now of London.

One of the principal objects in view was to ascertain the comparative advantage of churning.

1. Sweet cream alone.
2. Sweet milk and cream together.
3. Sour cream, or that slightly acid.
4. Sour milk and cream together.
5. Scalded cream, or what is called clouted cream, as practiced in Devonshire.

The principal results of the experiments are the following:

1. That the addition of some cold water during churning, facilitates the process, or the separation of the butter; especially when the cream is thick and the weather hot.

2. That cream alone is more easily churned than a mixture of cream and milk.

3. That butter produced from sweet cream has the finest flavor, when fresh, and appears to keep longest without becoming rancid; but that the buttermilk so obtained is poor, and small in quantity.

4. That scalding the cream, according to the Devonshire method, yields the largest quantity of butter, which, if intended for immediate use, is agreeable to the palate, and readily saleable; but intended to be salted, is more liable to acquire, by keeping, a rancid flavor.

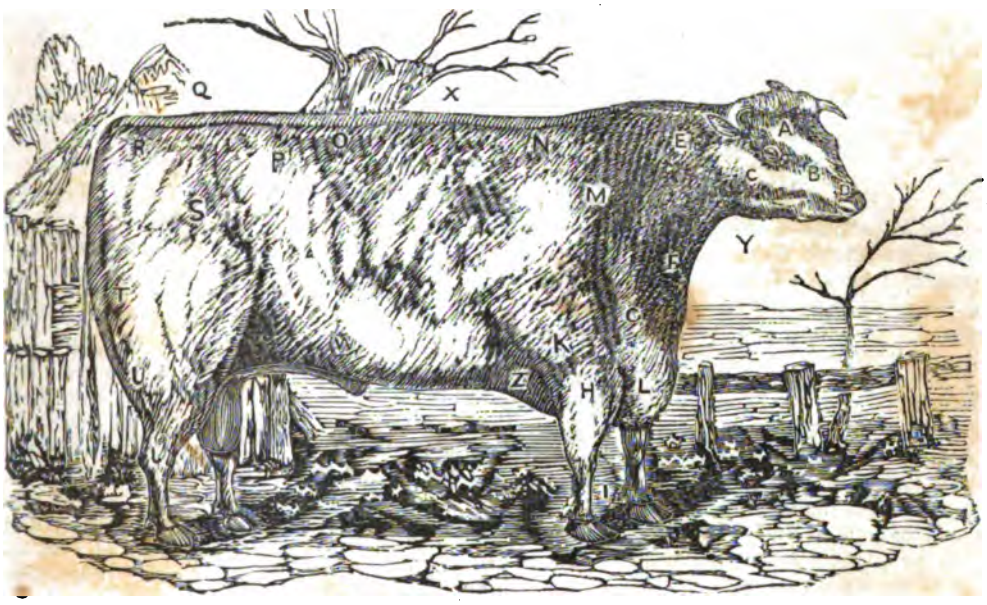
The process of scalding is troublesome, and the milk, after the removal of the cream, is poor, and often would be unsaleable from the taste it has acquired from the heating.

5. That churning the milk and cream together after they have become slightly acid, seems to be the most economical process on the whole; because it yields a large quantity of excellent butter, and the buttermilk is of good quality, a point of some importance where buttermilk is largely used as an article of diet, as it is in Lancashire.

6. That the keeping of butter, in a sound state, appears to depend on its being obtained as free from uncombined albumen, or caseine, and water, as it can be, by means of washing and working the butter when taken from the churn.

The author mentioned the interesting fact that, in the course of his experiments, he found when sweet milk and cream were churned together, and though cold water was added, after an hour and a half, and then after three hours' churning not a particle of butter was obtained.

FORMS OF CATTLE.



A. Forehead.
B. Face.
C. Cheek.
D. Muzzle.
E. Neck.
F. Neck Vein.
G. Shoulder Point.
H. Arm.
I. Shank.
K. Elbow.
L. Brisket, Bosom, Breast.
M. Shoulder.
N. Crops.
O. Loin.
P. Hips, Hucks, Hooks or Huckles.
Q. Crupper Bone, or Sacrum.
R. Rumps, or Pin-Bone.
S. Round Bone, Thurl or Whirl.
T. Buttuck.
U. Thigh or Gaskit.
V. Flank.
W. Plates.
X. Back or Chine.
Y. Throat.
Z. Chest.

Observation and attention have satisfied skilful and experienced men, that there are certain conformations of outward structure that, in cattle, are indicative of peculiar properties; and thus a guide is obtained for the judicious breeder, by which he may almost unerringly select and perpetuate his stock. It is not impossible to convey this valuable information, obtained only with great labor, by means of written communications; but in all attempts of the sort, certain technical terms for certain parts of the animal are necessarily resorted to, which

are generally incomprehensible to the uninitiated. To assist those who entertain the laudable desire of profiting by the experience of others, we have had an engraving made in which the "points" are marked and the technical names appended.

As a fit accompaniment to this engraving, we have selected the following extract from a communication from that distinguished Kentucky breeder, Dr. Martin, to the Editors of the "Farmers' Cabinet":

The two principal objects in raising cattle, appear to be *beef* and *milk*. And as certain forms are found to possess particular qualities, I shall proceed to give those forms, and the desirable qualities generally connected with them.

The head should be small—the muzzle fine—the countenance calm—horns fine—neck light, particularly where it joins the head—breast wide, and projecting well before the legs—shoulders moderately broad at top, and the points well in, so as to leave no hollows behind them when the animal is moderately fat—the girth behind the shoulders should be deep, so that if the carcass should be cut across here, the section would be an *ellipse*, blunt at both ends—back straight, wide and flat—ribs broad, and the space between them and the hips small—flank full and heavy—belly well kept in—hips globular, wide across and on a level with the back—twist wide, and the seam in the middle of it well filled—thigh straight, tapering well down to the hock—the legs straight, short jointed, clean, fine boned, and standing wide apart—tail broad towards the top, tapering down small towards the bottom—body long, and joined smoothly to the quarters before and behind—skin soft and elastic—veins large.

I shall now proceed to show the advantages of the above form. The reason why the head should be small and muzzle fine—a small head facilitates birth—and as the head is composed mostly of bone, it shows fineness of bone, the advantage of which is fully appreciated by the grazier, who has learned that no animal fattens kindly that lacks them. Calmness of countenance also denotes a disposition to be contented, and is generally possessed by a gentle milch cow, and also denotes an animal that will fatten easily. The light neck will be very advantageous to the butcher, who will get much less coarse meat in such; short neck generally denotes a thrifty, hardy animal. A long, or ewe-neck,—that is, one falling off from the top of shoulders—denotes a tender constitution.

The wide breast and deep body, give greater room for the lungs, the importance of which will be seen presently. A straight back is indicative of strength; a weak animal is generally hump-backed; poor keeping will produce these deficiencies in a calf that was at first well formed. The straight back also, denotes aptitude to fatten. Much depends upon the room the lungs have; no animal can be a good one, whose lungs occupy a small space; and as the lungs occupy all the space inside the ribs, so it is important that this space should be large. For this reason, the ribs should spread wide, be deep, and extend well back to the hips. The full, heavy flank of the cow, is a most certain indication of a good milker; this, connected with *large veins*, particularly those on the side of the belly, generally called the *milk veins*, is a certain indication of a good milch cow: The milk is formed from that portion of blood that circulates on the external part of the cow; and as large veins denote a large circulation, so it is indicative of a good milker. The bull with a deep flank, generally produces good milk stock. The belly being nearly straight, shows that the plates of which it is composed are thick and strong; when the plates are thin, the belly sinks from the weight of its contents. Thick plates are of great advantage to the butcher, when the animal is killed, as it adds much to the weight of meat. Globular hips hold much meat, and it is much easier put upon them, than on those that are sharp. Wide hips give a broader loin and more capacity to the pelvis, which is of much importance in the cow, giving the calf more room. The hind-quarter that is long from the hip to the rump, and straight with the back, will weigh very heavy; and for the same reason, the twist (that is the space between the thighs) should be wide and well filled up, which gives great weight to the upper part of the thigh. Straight legs are now the fashion, and are said to be stronger than crooked ones—Clean legs, small bones, tapering tails, show fine bones—and such animals are easily kept, and when not in milk, fatten easily. A short legged animal also, is more easily kept and fattened, than long legged ones. When the brisket and twist are large, the legs will be wide apart.

I somewhat doubt the propriety of insisting upon a long body; but a good animal with a long body, will weigh much heavier than one with a short body; but it is much easier to breed *good animals with short bodies*. There is a continual tendency in the produce of the long bodied animal to be narrow in the breast, which is not the case with the shorter animal. And as a general rule, the shorter animal fattens much more easily. However, if the width of the carcass can be kept up, a long body is to be preferred. Round bodies were formerly the fashion, but the deep body is now thought to be decidedly best. The limbs do not join to the body of the round animal, as smoothly as to the oval—there generally being a hollow behind the

shoulder; neither is the carcass as heavy.—Round animals too, generally carry the fat upon the surface, and do not mix it as well with the flesh. A soft and elastic skin, is one of the most certain tests of an animal that will fatten kindly. An animal may have the finest form and the most perfect symmetry, yet if he lacks the proper "*feeling*," he will not fatten kindly. On the other hand, if he has the proper "*feeling*," he may lack much in form, and still will fatten kindly. By "*feeling*," is meant certain sensations produced by "*touching or handling*" an animal; the easiest learned of which, is the softness and elasticity of the skin. The elasticity is occasioned by the quantity of cellular substance (that is, little elastic bags to hold fat) that is placed between the skin and the flesh.—As this cellulah substance can be discovered by an experienced "*handler*," even down among the muscles, (lean flesh,) so he can tell whether an animal will fatten in such parts, and whether the fat will be well mixed with the lean. But this knowledge is not to be obtained without much practice.

I have above described the most approved form for cattle, and have given the reasons why this shape is preferred. There is another reason not yet mentioned. When the cow has ceased to give milk, and has been fattened, it will be found that she will not only weigh heavy, but will carry her weight upon the most valuable parts. For it is known, that the butcher sells some pieces of beef for twice as much as others. And she can be fattened upon half the food necessary to fatten an inferior animal.

I have said nothing about the shape of the *udder* and *teats*, as these can be best judged of when the cow is in milk; and then the *best proof is milking her*. Still it may be serviceable to say, the udder should rather be round than long; should lay up close to the body; should spread forward—teats about equally distant, of moderate size, say about two inches in diameter, next the udder, and taper down to the point, which should be blunt rather than sharp: they should be from four to six inches long.—The udder, when empty, should be greatly reduced in size, and the skin should contract so as not to leave it flabby;—it should not feel at this time hard and knotty; as this would indicate that it might become thickened and scirrhous, so as to make the cow liable to inflammations, and probably loss of some of the quarters.

SAMUEL D. MARTIN.

Colbyville, Kentucky, April 3, 1843.

VIRGINIA FARMING.

It may be remembered, that in an early number of our second volume, we had occasion to publish and comment on a certain communication made by Mr. SIMON BROWN to the Editor of the "Farmers' Visitor." This communication was a severe, but not unjust, criticism upon such portions of Virginia farming as had come under Mr. Brown's observation. In the course of our review, we undertook to invite the author to accompany us in a contemplated tour on James River, where we thought we could show him some things that would impress him with a more favorable opinion of the country. This invitation, it seems, has just fallen under Mr. Brown's eye, and has drawn forth the following response:

For the Southern Planter.

Washington, D. C., June 9, 1843.

Mr. Editor,—Feeling a necessity for a little "air and exercise," and a desire, not easily repressed, to luxuriate in the freshness of the country, amidst the songs of birds, the flowers, and the glorious assemblage of nature's beautiful things at this season of the year, I resolved, without much debate, to leave this "City of Debate," and look out once more upon the world around me. But, where to go, was the question which arose for decision; East, West, North or South? There was likely to be a sharp conflict within, when fortunately, the recollection of the fat things which whilom graced the hospitable boards in that land of hog, hominy and honey, dear old Virginia, came back and settled the difficulty at once. If those good old people who once fed upon quails and manna (food for the gods) could not refrain from sighing for the "leeks and onions," and the "flesh pots of Egypt," is it wonderful that I, who had banquetted upon corn bread, fresh butter and clabber, should also sigh to return to my first love? No. So here goes for Virginia. I wont detain you long by the way. I could spare only an hour to chat with the Fairfax folk about the "Yorkers" who have planted themselves in their midst, and who have taken root and are flourishing like a green bay tree. But, *en passant*, I wish you would write a lively, generous editorial, encouraging the good Fairfaxians to open their hearts, and if need be, their hands, too, to the new comers; tell them to evince a confiding, liberal disposition; to trust them with every "secret in the trade," both about *root* and *branch*—*fallowing* and *following*—*soil* and *sub-soil*—muck and manure, and every thing else which will have a tendency to facilitate the operations which I understand they have commenced with much flattering promise of success. And then, if they do not appreciate this confidence and good feeling, and reciprocate such favors by a free interchange of knowledge for knowledge, "write them down asses," "cute Yankees," or any thing else you please, except "gentlemen and

scholars." In the brief stay which I made at the Court House, much was said, I confess, in favor of the strangers, yet there was a slight curling of the lip and tossing of the head, with something approaching an arrogance of feeling, a kind of "stand-aside" air, "I am holier than thou," which I regretted to see. And when they inquired (jocosely, of course,) the price of wooden nutmegs and hams, I, believing "that a soft answer turneth away wrath, merely replied that, *my wife says*, she has never heard of any Yankees *purchasing* such articles themselves, how many soever they may have sold! However, all this is merely seed sown by the way side, which will soon perish for lack of depth of root. Well, let us jog along.

Imagine me then, at the house of my old friend, (and yours too, I believe,) Alfred Ball, Esq., in Prince William, on this 1st day of June, 1843—present, host and hostess, two charming young ladies (bless their hearts) my *compagnon du voyage*, J. T. B., the king of good fellows, and your humble servant, all sitting by a rousing fire which was not at all uncomfortable, while we were eating green peas and strawberries. Various were the subjects briefly discussed on that happy evening. Literature, state and national policy, crops, frosts, and agriculture, all delightfully interspersed with lighter "lady talk," while delicate fingers, with commendable industry, plied the useful needle. In the midst of our agricultural chat I was introduced to the "Southern Planter," a gentleman of good, fair proportions, of some pretensions and considerable promise. The following day I took occasion to hold several hour's communion with the said Planter, and am happy to say that I am highly pleased with the acquaintance. And while I beg you to excuse my dulness in not becoming earlier acquainted with so excellent a work, I hope you will *hatch out* some apology for not sending me the number containing your strictures upon a communication of mine published some time since in the Farmer's Monthly Visiter. How did you expect me to peregrinate with you, and how to make my heart glad, with a sight of those goodly things on the banks of James River, with such a sideway invitation? It reminded me at once of my good old aunt Hetzy, who, being a little shy of some of her poor relations, when she wished to omit any of them, was sure to send their invitation in such a round-about way as to make it impossible to reach them before the party was over!* Now if you will break that "bottle of wrath," which you have been keeping warm, and will shed somewhat gentler ink upon what you conceive to be my errors, I will pass a resolution *nem. con.* to consider your invitation "just as good as new," and will present myself to your honor the first opportunity, when we will embrace all those rare delights which you have so felicitously hinted at.

Some of your strictures upon my remarks on Virginia Farming, are a little *too strict*, and some phrases a "leetle too sewere." Burdocks and nettles! You are as sharp as a newly-set pruning hook. Nevertheless, I am willing to let the "justice and liberality" which you *do* acknowledge, go (all in the *farming* way) as a little pure lime to neutralize the acids of "asperser," "ignorance," and a few such gentle terms, which your remarks contain. That's the way we do in the soils, you know.

I have carefully examined the contents of the Southern Planter, and am happy to add my testimony to its value. You have able correspondents, and the style and typographical appearance of the work is neat and attractive. Extensive travelling, by the Editor, among the planters, will give him opportunity to note observations which, written out, will give the work a freshness and value which it will be difficult to acquire in any other way. It is impossible that the science of agriculture shall not advance with rapid strides when such works as the Planter and several other papers devoted to the subject, are scattered plentifully among the farming population. I consider the man who communicates any improvement in agriculture or agricultural implements to the public, as conferring a lasting good to his kind, and as infinitely more worthy a niche in the temple of fame, than thousands of those whose names are rung through the land for deeds whose benefits die with the day.

My excursion was too hurried and brief to afford me any material facts. I strolled over the plantation of my friend Ball, and was gratified at the success which has attended his efforts. His example I found contagious, and will prove of great advantage in that section. The crops, however, at this juncture are unpromising, in consequence of the cold and wet weather. There was a heavy frost on the night of the 1st instant which did considerable damage to the tenderer plants. The practice of tilling a less number of acres and of cultivating them highly, is gaining rapidly, as is also that of improving their breeds of horses, cattle, sheep and swine. In short, every thing is promised, and already a great work is begun.

If I find opportunity, and the materials which

* We can assure Mr. Brown that we are not at all like his aunt "Hetzy," for we had every desire that he should receive our invitation at the time it was given, but as he was a wanderer, with only a name, and, as far as we knew, without a "local habitation," we did all we could, and sent the invitation to his friend, Governor Hill, with a request that he would forward it to its destination. But in Virginia a "good fellow" is always welcome, and it is never too late here to accept an invitation once given.—Ed.

I need, I will send you a communication or two of a somewhat graver cast in the course of the summer. In the meantime, allow me to thank you for the kind invitation contained in the Planter, to gossip agriculture with you on the banks of your beautiful river, and believe me to be, with great respect,

Truly yours,

SIMON BROWN.

We hope Mr. Brown will not forget his promise to let us hear farther from him, and that our *touchiness* will not prevent him from animadverting freely upon what he sees of an objectionable character amongst us. We are a little restive under the accents of reproof, but when administered gently by the hand of a friend, it is a wholesome medicine, and one we should try to swallow without a wry face.

BIRDS ON FARMS AND ORCHARDS.

An extensive experiment has been made on the Continent, the result of which has been, the opinion that farmers do wrong in destroying crows, jays, &c., and the small birds on their farms, especially where there are orchards.—That birds occasionally do mischief amongst ripe grain, there can be no doubt; but the harm they do in autumn, is amply compensated by the good they do in spring, by the havoc they make amongst the insect tribes. The quantity of grubs and bugs destroyed by crows, and of caterpillars and their grubs by various small birds, must be annually immense. Other tribes of birds which feed on the wing, destroy millions of winged insects, which would otherwise infest the air and become insupportably troublesome; even those usually supposed to be mischievous in gardens, have actually been proved to be innocent, for on examination they have been found to destroy those buds only, which contained some destructive insect. On some very large farms, the proprietors determined a few years ago, to offer a reward for the heads of crows, but the issue proved destructive to their farms, for nearly the whole of their crops failed for three succeeding years, and they have since found it necessary to import birds to restock their farms! And of late years, the extensive destruction of the foliage and young fruit trees in orchards, by a species of caterpillar, has excited the attention of the naturalist; and it has been found to have arisen from the habit of destroying those small birds about orchards, which, if they had been left unmolested, would have destroyed or kept down these destructive insects.

Every crow requires at least one pound of food a week, and nine-tenths of their food consist of worms, grubs and insects; one hundred crows then, in one season, destroy 4,780 pounds of worms, grubs, insects and larvæ; from this one fact, some slight idea may be formed of the usefulness of this much persecuted bird, the farmer's best friend: but a thousand more well-attested facts might be stated to show the value of birds to the farmer, if more were needed.—Let then, every farmer, and every one who is interested in the labor of the farmer—and who is not? do what he can to protect them, and the face of the country will no longer present the appearance of a scorched and blasted wilderness, but will preserve its beauty to the eye, and the trees will produce their fruit in season.

New England Farmer.

REAPING MACHINES.

During our late harvest we have had in our vicinity two rival machines for reaping wheat. Messrs. M'Cormick, of Rockbridge, and Hussey, of Baltimore, were the competitors for public favor. On one or two occasions they met by agreement in the same field and a considerable crowd assembled to witness the contest. A field belonging to Mr. Ambrose Hutcheson, a few miles above the city, was the arena of the first trial. Here, the palm was awarded to M'Cormick, as will be seen by the following

REPORT.

The undersigned were called upon, at the farm of Mr. A. Hutcheson, to witness the performance of the wheat reaping machines, invented by Cyrus H. M'Cormick and Obed Hussey, and to decide upon the merits of the same. We are unanimously of opinion, that both of them are valuable inventions, and richly merit the encouragement of the farming community. They both performed most admirably. The Committee feel great reluctance in deciding between them. But, upon the whole, prefer M'Cormick's.

C. W GOOCH.
W. H. ROANE.
JAMES PAE.
CURTIS CARTER.
FRANCIS STAPLES.

June 30, 1843.

Mr. Hussey, however, contended that he had not had a fair chance, inasmuch, as the field had been selected by his adversary, and was not calculated to test those qualities in the machines in which his excelled; moreover, he said, that circumstances compelled him to come to the trial with a low priced, inferior machine, which was not at all the one generally

known as Hussey's reaper: he, therefore, invited Mr. M'Cormick to meet him again at Mr. Roane's on the following Wednesday. At this exhibition we were present, and we were much pleased with the operation of both machines.—The company, consisting of some fifteen or twenty gentlemen, seemed pretty equally divided between the two. For our own part, we thought that there were some advantages appertaining to the one that did not belong to the other, and *vice versa*. For instance, M'Cormick's is the lightest draught, being worked by two horses, whilst Hussey's requires four. From all we could learn and judge from the construction of the two, we should infer that M'Cormick's would cut best in damp grain; but on the other hand, in lodged or tangled grain, Hussey's certainly possesses great superiority. It is also a heavier, stronger, and more efficient machine, cutting, we should suppose, if well attended, from a fourth to a third more in a day. The price of Hussey's machine is $160, that of M'Cormick's $100.

The greatest advantage we conceive about these machines is the extreme cleanness with which they both cut. They shatter, too, infinitely less than the cradle. Either is worth more than its cost to any farmer, who cultivates a large tract of smooth, level land in wheat or oats; still, we would advise no one to go into his harvest relying upon his machine alone; what with wet wheat, tangled wheat, gullies, and hill sides, he will find that the cradles cannot be dispensed with, and it will be necessary to have them ready to take the place of the machine where such circumstances oppose its operation.

For the Southern Planter.

CHICKENS.

Mr. Editor,—Having a friend from Missouri with me last night, we were talking over many things; among the rest, he mentioned a plan of raising chickens which had proved very successful, and gained great popularity in that section of the country. Being very much pleased with it, and placing a high estimate upon the profit and convenience of raising all kinds of fowls, I communicate it to you for the benefit of the readers of the Planter. Have a lot of sufficient size enclosed, so as to keep your chickens in it, and keep it regularly ploughed up, to prevent any grass at all from growing in the yard; set some little forks in the ground, about one foot high; lay some poles across them upon which lay some brush; it makes a fine harbor for the chickens; they run under from the hawks, and go under them frequently to enjoy the shade. By keeping the ground ploughed up, the chickens never have the disease called the gapes, which I have seen thousands die with. They should be fed upon dough which is made up with buttermilk, and sometimes grease may be put in to an advantage. I have no doubt but the same plan would be equally as good for turkeys when young. Ducks and young geese require grass to feed on; it is said that there is a very fine worm, not larger than a thread, in the grass, which the young fowls get in their throats, and which is one cause of the gapes; in other cases, it is said to be occasioned by the dew or wet grass after rains.

Yours, respectfully,

J. W. M.

Tye River Warehouse, July 2, 1843.

THE SOUTHERN PLANTER.

We have received the June number of the above work, published in Richmond, Va., by C. T. Botts, and have perused its pages with much interest. It is neatly put up in pamphlet form, contains about twenty-two pages and is published once a month, at the unusually low price of $1 per annum. We are well aware that many agricultural works are of no manner of use to the agriculturists; as they are poorly edited; filled with communications from tyros and fancy farmers; or, with immoderate puffs of new inventions, new wheat, new potatoes, new kinds of hogs and cattle—the first calculated to mislead the young reader and make him too *fidgety* in farming—and the latter, to drain his pocket. There is a great deal of humbuggery in this world, and we have men who practice it as a calling. They go upon the idea that, "all the fools are not dead yet," and put at our pockets, with multicaulis, then with Italian Spring wheat, next with Dutton corn, and now with Berkshire pigs, Durham cattle, and T. H. Bickes' plan of making luxuriant crops on poor land without ploughing and without manure. However, from the spirit of the Southern Planter, we think it will at once expose to derision and contempt each new humbug as it is presented; and thus guard inexperienced persons against parting foolishly with their money. The late Judge Buel warned the readers of the Cultivator against the multicaulis fever, and said speculators were at work, long before the disease had reached this part of Virginia. Had the editors of agricultural papers been equally candid, millions might have been saved to the unwary.—We think Mr. Botts will pursue the same course, and cause his publication to be useful, instead of detrimental, to the agriculturist.

An agricultural work, suited to the farmers,

in this region of Virginia, would be of great service to them. Mr. Botts by obtaining subscribers and procuring correspondents, between tidewater and the mountains, could make his work valuable to persons, whose attention is turned to grazing and restoring worn-out land to fertility by the use of clover and plaster.—The products and system of farming pursued in lower Virginia, differ from the products and system prevailing in this region. They rely on tobacco and corn as their money crops; we on wheat and cattle:—they have inexhaustible flats; we have hills, which require improvement. His correspondents are tobacco growers, and what they discuss would have been useful in this section, when it was under process of being worn out by tobacco; but now, is nothing but mere reading. On the other hand, the Cultivator is published for a region of country, where slave-labor is not known; where the farms are small, and roots and vegetables cultivated very extensively. Hence it is that there is more about turnips and potatoes than is of interest to us. There are in the counties bordering on the Blue Ridge practical farmers and graziers, whose intelligence and experience, can furnish a variety of useful information; and if Mr. Botts will only enlist them in his service his publication will suit *all Virginia* better than any other yet sent out. We have in this county men who know how to farm, and how to keep their land rich, and make money besides. Thousands of acres hereabouts, which, twenty years ago were poor, are now producing heavy crops of clover, timothy and grain. To such as these we refer Mr. Botts.

We extract the above from the "Flag of '98," published at Warrenton, Fauquier, chiefly for the purpose of saying, that our great ambition is to publish an agricultural work that shall be entirely of a *practical* character, and acceptable to every portion of the *State of Virginia*. To enable us to do so we must rely upon the assistance of the friends of the cause in every section of the State. Nothing would please us more, than if, through the assistance of our friend of the "Flag," we could grace the Planter with the experience and wisdom of the farmers of Fauquier and Loudoun; especially upon the subject of the clover, plaster and cattle system, which has enriched the proprietor and the soil at the same time, wherever it has been introduced.

FEEDING HORSES.

Various opinions are entertained as to the best and most economical mode of feeding horses, and many experiments are on record that have been instituted to settle the question. The result seems to be, that at the ordinary prices of grain and hay, it is cheaper to keep horses on grain, than on hay or on hay and grain. There is another important matter to be considered, however, and that is—is feeding entirely with grain, as conducive to the health of the animal, as a mixture of hay and grain? We do not believe it to be; and the general result of the experiments has been to show that it is not. Our own experience too would lead us to speak decidedly upon this point. We have tried feeding horses upon grain alone, and upon grain and hay, and found the latter the best for the animals. They were not so shrunk up or gaunt, there was more muscle and consequently more weight, and whatever may be thought of this latter quality in a race horse, where nothing but sinews and bones are required, every farmer knows that the road or farm horse is worth but little without weight. Feeding horses on grain alone, is like keeping a man on wheat bread solely; he will live for a time, but will finally sink under the experiment. In this case, the finer the flour the worse for the man. We have never had horses in better condition for labor, than when we have fed them with cut wheat straw, wet up in a tub with Indian corn meal. It is evident there must be some proportion between the bulk and the nutritive power of food, and grain alone gives too much nutritive matter for the bulk. Oats, perhaps, approach nearer the standard than any other grain; but the use of these alone will in a long run be found unadvisable.

One of the most carefully conducted experiments we have noticed was the one made by Mr. Brotherton, near Liverpool; and he came to the conclusion that horses cannot be kept in a condition fit for work, if fed on grain alone.—For nine years Mr. Brotherton allowed eight horses, three Winchester bushels of oats and one of beans, but no hay or chaff. During this period he annually lost more or less horses, which he attributed to the quantity of grain being greater than the stomach could digest.—This induced him to adopt feeding hay with his grain in the following proportion:—To eight horses he allowed one bushel of oats, one bushel of beans, and three bushels of cut hay, straw, or clover; and he found them better able to do their work than before, and for several years after adopting the plan lost but one horse from disease. Farmers, we are confident, have much to learn on the subject of feeding animals, and the health and good condition of the latter will, we doubt not, be found compatible with greater degrees of economy than has generally been practised.—*Cultivator.*

ORIGINAL COMMUNICATIONS.

We have been much complimented lately upon the greatly increased quantity of our *ori-*

ginal communications. For our own part, we think there is an idle prepossession existing in the public mind in favor of what is called an original communication. If we can find a good thing, should we decline to publish it because it has been communicated first to some other paper? Would our readers cut us off from the prolific source of agricultural information afforded by our exchange papers, from the benefits to be derived from the experience and information of the correspondents of the agricultural papers with which our table is daily covered? On the contrary, we often discard an original communication, and select an extract which we think conveys information of more value to the reader; and yet there are readers so senseless as to object to such articles that they are all "copied." We humbly conceive it to be our duty, diligently to examine all the material afforded us, and to select the best for our subscribers, from whatever source it may originate; and as the aggregate of the contributors to other papers is to the number of our own correspondents, as an hundred to one, it stands to reason, if we labor as we should do and go over the whole ground, that each number of the Planter should contain at least ten *selected* for one *original* article; and but for the public taste, it should be so. Nothing would tend so much to abridge our editorial labors as the resolution to fill our columns with original matter; to do which, we would only have to hand over to the printer one half of the manuscript copy we receive from the post office.

For the Southern Planter.

SEED WHEAT.—CAUTION.

Mr. Editor,—Let me advise any farmer, who intends to purchase seed wheat, to do so of the *raiser* of the wheat, who is bound to *know* whether he is disposing of a good article or a bad one. I, with two of my near neighbors, in this immediate vicinity, (and I understand a considerable number of persons in different parts of the country) purchased a part of our seed wheat, in October last, from a *commission merchant*, in the city, at the round price of *one dollar and twenty-five cents* per bushel, thinking we were getting a most superior article; when lo! what is the result! my two friends have ploughed up considerable portions of theirs—one re-sowing with good seed, the other seeding the land with oats, and both considering the remainder of the land seeded with the wheat spoken of, as thrown away for the present crop. For my own part, having seeded my land with clover and grass seed, I was compelled to let it remain; and now have the daily mortification of seeing one-sixth of a crop on my best land, while I have even an abundant crop upon land adjoining, but seeded, with wheat purchased of a *farmer.* Upon mentioning my mortification to the person of whom I purchased it, but whom I freely and willingly acquitted of all knowledge *at the time* of the seed having been *heated,* as it must have been, my only consolation was, "He could not help it; if I had not purchased it, some one else would, as plenty more wanted it." So after this, say I, buy of the raiser.

A SUFFERER.

Henrico, June 26, 1843.

GAPES IN CHICKENS.

A writer in the Farmer's Cabinet, says, positively, that the gapes in chickens, which cause so many to die, are occasioned by worms in the windpipe; and that if the poulterer is pleased to take a feather, strip the sides all off except a small tuft at the end, dip this in spirits of turpentine, catch the chicken, open its mouth and just touch this turpentine to the mouth of the windpipe, which may easily be seen at the top of the tongue and near its roots, the worms will almost instantly die, and the chicken as instantly recover. He says there is no danger to the chicken from this course.—*N. E. Plough Boy.*

We believe with the writer of the above that it is worms which occasions the *gapes,* and think that the application of the spirits of turpentine would prove effectual, but we deem it proper to add the remedy which we have always found effectual. Whenever we found our chickens laboring under the disease, we gave them each a tea-spoonful of a strong solution of assafœtida, which invariably cured the disease, and as we supposed, by dislodging the worm, which we took it for granted was the cause of the disease.—*American Farmer.*

We never fail to disseminate information that has the slightest tendency to increase the quantity or quality of *fried chicken.*

ITEMS IN DOMESTIC ECONOMY.

Use spirits of turpentine to remove grease spots from clothes. It dissolves the grease, and then soap the more easily removes it. Grease may be removed from undyed woollen by a solution of pearlash.

Lime spots on woollen clothes may be completely removed by strong vinegar. The vinegar effectually neutralizes the lime, but does not generally effect the color of the cloth. Dark cloth, the color of which has been completely

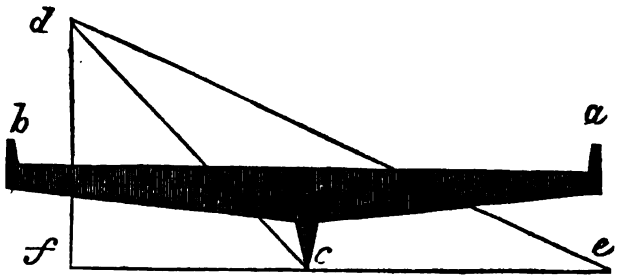
destroyed in spots six inches square, has thus had its original color perfectly restored.

The whiteness of ivory handled knives may be restored by rubbing them with fine sandpaper or emery.

The oftener carpets are shaken, the longer they last, as the particles of dirt and sand which collect upon them grind the threads. Sweeping them also wears them.

Dry wood will produce on a moderate estimate, twice as much heat as the same amount of green wood; and saves much trouble in kindling fires on cold mornings. To prevent its burning away too rapidly, the sticks should be large. To suppose that green wood will actually cause more heat in burning than dry, is as absurd as to suppose a vessel of hot water will freeze sooner than a cold one.—*Cultivator.*

GEARING HORSES.



In the various occupations of the farm we make use every day of the result of scientific inquiry, frequently without noticing the *wherefore* of the peculiar process we adopt, and frequently losing all the benefit of the scientific principle from ignorance or forgetfulness. In as simple a matter as the gearing of horses there is an important principle of mechanics to be noticed, without an observance of which it is impossible to get a team to work to the greatest advantage and ease.

The annexed cut represents an ordinary double-tree; and our object here is to illustrate the importance of constructing it so that the point at which the tree is fastened to the load shall be considerably behind the point at which the horses are fastened to the tree. The horses are here hitched at *a* and *b*, and the tree draws the load at *c*, considerably behind a line which would pass from *a* to *b*. The advantage of this construction is this: as soon as one of the horses goes ahead of the other, his part of the lever the double-tree forms, becomes the shortest, and the other, working to far greater advantage by a longer lever, is soon able to come up, or if still lagging behind is able with even inferior strength to fully divide the draught with the other. Suppose the horse at *b* starts ahead and draws his part of the double-tree forward to *d*; *a*, at the other end then of course falls back to *e*, and the line *d*, *e*, will represent the position of the double-tree. In this position, the fulcrum being still the same at *c*, and the horses still drawing straight ahead, it will be seen that the right hand horse will have a lever rather longer than before—perpendicular to the line of draught and at which he works to the greatest advantage; whereas the left hand horse, has a lever at which he exerts part of his force in pulling lengthwise with the wood, the real mechanical length of which is only *c*, *f*, nearly a third shorter than that of the other horse.

Important as this principle is in constructing double trees and working two horses abreast, it is far more important in single-trees and the working of one horse. If the horse pulled like the ox, by some point of his body on which the load bore in all gaits with an equal pressure, it would not be necessary to give his single-tree any swing, or adjust the lever power in the manner above illustrated. But a horse by his gait in harness is continually advancing one side ahead of the other as he moves his shoulders. When a horse plants one of his fore feet the exertion to draw the trace on that side is comparatively nothing. He merely leans himself forward, and his weight, the exertion of his hind legs as well as the fore leg planted, all aid in facilitating the steady pressure the shoulder of that leg makes against the load. It is when his fore foot rises to be advanced another step that he is taxed the worst; and he must then by the muscles of one shoulder alone move the whole load the distance he advances his shoulder, unless the single-tree is given a swing. By reference now to the above cut and a recollec-

tion of a horse's gait, it will be perceived that when a horse thus raises his foot to make another step, the lever of his single-tree on that side will correspond with that of *f*, *c*, in the double-tree above, and hung longer than that of the opposite side, make the resistance to the shoulder exerted much lighter. The only way in which horses could work at all in single harness without having a swing to their single-trees is in drays or carts where the pressure is so great on the back that they pull more by that than by their shoulders. We have little doubt that many of the cases of swiney, big-shoulder, &c.—diseases produced by over-straining the muscles of the shoulder, are produced by a neglect of the principle we have here attempted to illustrate in gearing the horse.

South Western Farmer.

For the Southern Planter.

Mr. Editor,—In your June number "Investogator" remarks, "If I lived in or near Richmond I should undoubtedly seek the privilege of saturating plaster with urine, at the capitol." "Also, that of composting dead animals with marl near Rocketts." I am composting dead animals with ground plaster. Will he be so good as to give his reasons for preferring marl? Is not ground plaster better?

Very truly your friend,

GEO. WOODFIN.

July 7, 1843.

CUTTING TIMBER.

Editors of the Cultivator,—I have long wished to hear an opinion expressed by some of our scientific men, in regard to the proper time of cutting timber, and the cause of worms in wood. I have frequently observed axe handles, and handles of other farming implements, almost eaten up by worms, and perhaps not a hole to be seen on the outside of the wood. The question is, how come the worms in the wood, and what time of year must timber be cut, to prevent the worm from attacking it? ADOLPHUS."

There are a multitude of insects that deposite their eggs in wood. In process of time the egg changes to a worm or grub, which feeds on the wood for a time, when it emerges from the tree and becomes a perfect insect. Of these borers those that prey on the apple, locust, &c. are most familiar. There are some kinds of timber, such as hickory, ash, and maple, which are liable to be injured by worms at times, to such a degree as to render them utterly worthless.—They become what is called "power post;" or present when broken, or cut into, little more than a fine dust, while the outside is apparently sound. Hoop poles furnish frequent examples of this insect destruction; and to avoid it, coopers prefer having their poles cut in the fall or winter; from November to February, being considered the best to secure exemption from the worm. It would appear, however, that there is a short time after the leaf has been fully formed, and the bark ceases to peel readily, in which wood if cut will be free from the worm. From some experiments, this period would seem to be in the month of June. The cause of this, doubtless is that the insect depositing the egg is not developed so early in the season; but appears immediately afterward.—*Cultivator.*

For the Southern Planter.

AGRICULTURAL APHORISMS.

NO. IV.

Partly Extracts.

You need not go into the house to seek and know the farmer; only look on his farm, and you know all, except the height of his body.

Nature bids you to dislike deformity; therefore, put your work in order.

If you ask me which is the real hereditary sin of human nature, I answer, indolence—it begets all manner of vice, and starvation of man and beast.

Who will not see and act, when he should, shall not act when he would.

Compare carefully and frequently the different propositions and modes of business, and choose with prudence.

Who loses the *sunshine*, shall not profit by *moonshine*.

He alone has energy, who cannot be deprived of it by misfortune.

There are but three classes of men, the retrograde, the stationary, and the progressive. It is your right to take choice.

No despondency, friend, you cannot tell what you can do, till you make a mighty effort.

I would as soon undertake to transpose a mountain, as to subdue indolence and obstinacy.

He who becomes every day more sagacious in observing the works of nature, is himself a noble piece of work.

The best time to kill grass and weeds in a corn field, is before they have life.

Who will sacrifice nothing and enjoy all, is a fool.

The discovery of truth by slow progressive meditations, is *wisdom*.

He who has all confidence in himself, is equally a fool with him who has no faith in others.

Who will not plough by reason of the heat or cold, shall beg in harvest and get nothing.

Kiss the hand of him who can renounce what he has publicly taught, when convinced of his error.

A bad system is better than no system.

Avoid him as a friend, who makes a wry mouth at the praises bestowed on a good farmer.

Imitate him whose observation passes not over the most minute, whilst it follows only the highest objects.

The more there is of mind in your solitary employments, the more dignity in your character.

Two misfortunes—thinkers are scarce as gold, and those who think least are least disposed to let others think for them.

Trust him little who praises all, and him less who censures all, and him least who is indifferent about all.

Who postpones the business of to-day till the morrow will probably postpone his to-morrow to eternity.

He is much greater, who produces one thing entire and perfect, than he who does many by halves.

As the captain with a foil on the point of his spear, so the farmer with a dull implement—hard labor and but little execution.

If you will put your mark on such of these aphorisms as create an uneasy sensation, and send me the copy, I will know you right well.

ARGUS.

Amherst, July 8, 1843.

For the Southern Planter.

BOMMER'S MANURE.

Mr. Editor,—The following communication I am sure will be read with interest by most of your subscribers, and as I have received recently, so many interrogatories concerning "Bommer's Manure," I have concluded to send it for publication in the Planter, with such remarks as I may make upon it:

King William, July 6, 1843.

MR. WOODFIN:

Dear Sir,—I have seen the result of your experiment with Bommer's patent manure, in the last Planter, and while I believe every word you have said about it, I am not entirely satisfied that it will be to the interest of every one to purchase the right to make and use it. Virginians have been so often humbugged with patent inventions, that I am very slow to receive any notion that comes secreted under a patent right, I will, therefore, be obliged to you to answer the following questions:

1st. Can the materials of which the manure is composed, and also those required to produce such speedy decomposition, be procured in sufficient quantities on a *poor forest farm* to make it an object on such a farm; or is it only adapted to the neighborhood of towns, where mineral, animal, and other substances can be readily procured at little cost?

2d. From the experiment you have made, do you think that labor may be profitably employed in making this manure on large farms, or is it merely intended for experimenters on truck patches, gardens, &c.?

3d. As the decomposition is so rapidly produced, does not the ammonia (or whatever you chemists call it, I mean the strength of the manure,) as speedily pass off, and the manure become comparatively worthless, as you have seen farm-yard manure become by being kept too long?

4th. You say it is not costly, but troublesome; how much, and what kind of trouble is it? Is it that kind of trouble with which every successful farmer is acquainted, and for which he gets rewarded, more or less, or is it like the Indian's gun, cost more than it comes to?

5th. Taking every thing connected with it in consideration, would you advise a farmer owning some five or six hundred acres of poor land, situated twelve miles from navigation and thirty miles from any town, employing the labor of twelve hands, and with a large and growing family, and not a cent to spend in humbugs or costly experiments, to purchase the right to make and use this manure?

You will please pardon the liberty I have taken in addressing this communication to you; my only apology is my great desire to use all the means in my power, for the improvement of our mother earth, and I should like to become acquainted with this process of Mr. Bommer's, but do not like the idea of buying a pig in a bag.

Should you think it worth while to reply to this, you can do it through the PLANTER, if you prefer it, (as I suppose it probable you will receive other communications on this subject,) or by letter privately, by mail, as you may choose.

Yours, most respectfully,

WM. S. RYLAND.

In answering the foregoing queries I shall take them up in the order they are propounded, without any farther preliminary remark.

1st. "Can the materials of which the manure is composed, and also those required to produce such speedy decomposition be procured in sufficient quantities on a *poor forest farm?*" &c. &c. I answer yes—they can be procured in abundance, both for making the manure, and also for their speedy decomposition, with the exception of some articles necessary to make the lees.*

* The articles alluded to in the exception, which Mr. Woodfin did not consider himself at liberty to specify, are *lime* and *salt;* about fifty pounds of the former and a couple of pounds of the latter being required to an ordinary heap of the manure.—ED.

The method is not adapted to the neighborhood of towns, except where large quantities of vegetable substances can be had.

2d. "From the experiment you have made, do you think that labor may be profitably employed in making this manure on large farms?" &c. Answer, I do. It is equally well adapted "to truck patches, gardens, &c." if they have an abundance of vegetable substances, not otherwise.

3d. "As the decomposition is so speedily produced, does not the ammonia (or whatever you chemists call it, I mean the strength of the manure,) as speedily pass off?" &c. To this question I answer, in consequence of the great heat produced in the process of fermentation, it is quite probable that a portion of the ammonia may escape. Ammonia, however, has great affinity for water, and as a quantity of water is necessary in making the manure, I should think the escape of ammonia would not be very great. Mr. Bommer says "the salts produced in the process of fermentation, 'are a quantity of nitrate of lime and caustic potash, ammonia, and saltpetre'—four substances which modern chemistry has found to contain the most fecundating properties possible."

4th. "You say it is not costly, but troublesome—how much and what kind of trouble is it?" &c. I alluded to the trouble of collecting the materials, making the compost heaps, making the "lees," and the several applications and waterings with the same, necessary to complete the decomposition of the materials. The labor thus expended I am sure would result in a rich reward to a skilful and persevering farmer. I must most respectfully ask to be excused from answering the 5th question. I will not advise any one to buy the right, lest for want of proper energy and skill on the part of the purchaser, it might fail to answer his purpose, and I should have the blame; I will, however, say this much, that from what I have heard of Mr. Ryland's zeal and energy in doing what he can to improve our "mother earth," that Bommer's patent could hardly fail of success in such hands. With him it would neither be like the "Indian's gun," nor the "pig in the bag."

In conclusion, let me remark, that I am no way interested in the sale of these patents—I own only an individual right, and should there not be another sold in the State it would be a matter of perfect indifference to me.

Very truly, yours,

GEO. WOODFIN.

SOAP SUDS.

There is no better manure than dirty soap suds; and there is not a farm house in the country, but what produces enough of it in the course of a year, to manure a garden two or three times over. Dirty suds after washing, is almost universally thrown into the nearest gutter, to be washed away and wasted, would it not be an improvement, and show a laudable economy in the good woman of the farm house, to have it conveyed to the garden, to enrich the ground, and make the vegetables grow more luxuriantly? The potash, the grease, and the dirt, all of which are component parts of soap suds, are first-rate manures, and should always be applied to make plants grow, and especially when hard times are loudly complained of and sound economy is the order of the day.

For the Southern Planter.

COMMENTS ON THE JULY NUMBER OF THE SOUTHERN PLANTER.

This number as a whole, pleases me well, and I congratulate Mr. Botts and the Commonwealth on the success and preferment of the PLANTER. I verily believe that it is destined to become ere long, equal in every way to any thing of the kind in America. And why not? Are the people of Virginia less patriotic than others? Are they deficient in intellect or education? Have they less interest in the prosperity of agriculture? Have they less time to expend in investigation and communication?—Oh, Virginia! once thou didst stand erect, in health and beauty; and clad in goodly raiment, did look with pride on thy children. Then not one stain could be seen on thy garments nor one sickly furrow on thy cheeks; but lo, these many years thy condition has caused thee to bow down thine head with blushes, and when strangers pass by, thou art wont to hide, or disown thy name. Nevertheless I pray thee, my good mother, hold up thine head a little; for although we have in our youthful and frivolous days, acted ungratefully toward thee, yet since age and better judgment have come upon us, we are wont to become dutiful children. Yes, although my head is growing grey with age, yet I, for one, do espouse thy cause; and surely there are thousands more dutiful and competent than I. I hope that yet ere I die, I may see every wound on thy body healed, thy garments renewed, thy cheeks glowing with beauty; and we, thy children, enjoying the pride of owning thee as a mother, and the gratification of having returned to our duty. Virginia must rise; yea, may I not say, she shall rise and take that stand for which nature destined her. And shall not the SOUTHERN PLANTER be one of the prime instruments in this consummation, so devoutly to be wished for?

Root Culture.—Mr. Bement says "If the root culture can be made to succeed in Virginia, of which I have little doubt, I should not at all be surprised to hear that the lands there should

double in value in the course of a few years. In fact, I am so well convinced of it, that were I to sell the farm I now occupy, I should turn my face to Virginia," &c. Now, friend Bement, all you have to do is to come hither next fall and see for yourself, and I am persuaded you will doubt no longer. Indeed, sir, as altitude creates climate, we can give you any climate you desire, with the advantages of longer summers, and lighter snows; and that too anywhere about the centre of our State. We full well know your character, sir, and gladly would we adopt you in our family, and embrace you, and all such, as brethren. Do come, if only on a visit; and if we do not receive you with open countenances, hands and hearts, then we give you leave to "publish it in Gath, and tell it in Askalon."

Improvement of Old Land.—Mr. Morton says, "plaster, lime, &c. are rather expensive articles to be used broadcast." Now, although I like this communication very well in the general, yet I think this rather too much of a broadcast assertion. I wish Mr. M. had told us his whereabouts, for the cost of carriage and the action of the plaster on the land, should determine whether it should be used broadcast or not. Where judiciously used, I believe that at one dollar the bushel, it is the cheapest manure which can be bought, to be used broadcast or otherwise.

Fencing.—I wish Mr. Miller would abandon his crooked bank, if he will not his crooked fence. If the bank were straight and broader, the hogs could not root through so easily, the fence would stand firmer, and grass could be sowed and mowed therefrom.

Corn.—I suppose I can guess what Mr. Tucker means by "barring the corn, lapping the grass in the row, and splitting it again," but when he adds, "destroying the corn," I cannot guess; only that it may be a typographical error. Nor can I understand what he means, when he says, "In Roanoke we plough every other row through the crop, from the beginning; and every other row is of course worked differently." I would ask whether half the rows are never worked, or whether they are worked alternately? How is it they are worked differently? And how can a third more be cultivated? The Roanoke mode of culture may be better than mine, but I never suffer a sprig of grass to grow amongst my corn, so as to require barring or lapping; nor would I have such a plough amongst my corn as a gift. I speak from experience, yet I may be wrong.

Hanover Agricultural Fair.—Perfectly right, Mr. Botts; you should never gratify localities at the expense of the public. The good people of Hanover will justify your course, upon reflection.

Comments on the May and June Numbers.—I discover an error in my remarks to "A Young Planter." Read, "his assertion that tobacco will not take rot," &c. And a word for you, friend Botts. You say, "stones indubitably by the covering they afford, protect the earth from the rays of the sun, and so prevent evaporation," &c. Now, sir, with equal confidence I say you are indubitably wrong, except in case of large stones, and these too thick to convey unnatural heat to the earth. Then, and in that case, I too have often observed "that the most luxuriant tufts of grass or wheat in the field were those growing from underneath the stones."—But I would not attribute this luxuriance to extra moisture, but to the extra pasturage underneath the stones; and I must contend, that in the general, that pasturage is kept in good heart by the decomposition of the stones. But if Mr. B. will yet contend that stones are valuable to prevent evaporation, I will turn him over to my friend Goddin, of Bacon Quarter Branch, who I have no doubt will freely give him a few loads for the purpose of making experiments. Or if nothing else will do, he can send to me, and I will furnish him with a few hundred loads of boulders, which are now burning my land and crops to death.

A Ploughing Match.—Success to the pony purse, a glorious day for the ploughing, and a huzza for the most skilful ploughman.

INVESTIGATOR.

We are extremely obliged to our respected correspondent for the liberality with which he flings his stones at us, and we would not attempt to fling back again, but that we are desirous to obtain the benefit of his experience and observation upon a question involved in the difference between us. This difference, we humbly conceive, is narrowed down to the *cause* of the superior productiveness of land, which is covered by *large* stones; for that some size of stone is productive of fertility, we both seem to agree. "Investigator" attributes it to the decomposition of the material of the stone, we to the protection it affords as a covering from the sun and air.—We have long thought that the benefit of a cover was not sufficiently appreciated, and that the day would come when it would be recognized as one of the first principles in agriculture, that the land should be protected from the baneful influence of the sun and air. Has any man ever seen an instance where ground was so protected that it was not enriched? Where do cunning boys go to look for worms, those unerring indicators of fertility in the soil? They raise a stone or plank, and is it the decomposi-

tion of the one or the other that has produced the rich, moist earth underneath?

May not the consideration of this circumstance, we respectfully inquire, lead to the adoption of some valuable mode of improvement? May it not deter us from turning up and exposing to the influences of sun and air the subtle and hidden treasures of the earth? If we should so carefully preserve our heaps of manure from the hostile action of these elements, why should not we as carefully guard from their blighting influence, the same agents, that are constantly generated in the bowels of the earth? If in any manner we protect the surface of the earth for six months from exposure, we know that it is equal to a heavy dressing of manure; why then should we take the greatest possible pains to *expose* it as some of our farmers do?

Without forming a "theory" about the matter, ourselves, we should like, as the question has incidentally arisen, to pin the attention of "Investigator" to its consideration.

For the Southern Planter.

ERRATA.

Mr. Editor,—Please to correct an error in print, in the article sent by me at the request of the Club and published in the last number (6). On the 130th page, 2d column, 2d paragraph, 3d line, for "*sowing grass 'exclusively'*", read sowing grass *extensively*.

A. C. MORTON.

Richmond Markets, July 19, 1843.

TOBACCO.—Receipts more moderate; no material change in prices, except for fine manufacturing qualities. We quote lugs $2 a $2¼ and $2¼; leaf, common $3 a $3¼; middling $3¼ a $4¼; good $4¼ a $5¼; fine stemming and manufacturing scarce, and sells from $6 to $11¼, as in quality; a few extra manufacturing hhds. have been sold at from $10 to $40.

WHEAT.—A few scattering parcels have been delivered, but no price has yet been fixed.

FLOUR.—Canal: quantity in market very small—a few sales have been made on the Basin at $5. No City Mills flour in market, consequently no quotation can be given.

CORN—57½ cents per bushel.

OATS—26 a 29 cents per bushel from vessels, and 35 a 37½ from wagons and depot.

PROVISIONS.—Bacon: City cured, Todd's hog round and Smithfield held at 7 cents. Small sales Western sides 6 a 7, mostly 6½; shoulders 4 a 5, as to quality. Lard—7 a 8, dull—all kinds of bacon rather dull.

BUTTER.—Mountain, wholesale, 6 a 8 cents per lb. for inferior. A prime article commands from 12 to 15 cents. A very large supply in market.

CHEESE—5½ a 7 cts. per lb. Very little in market.

CATTLE.—For cattle on the hoof, $4 to $4½ are the general prices. Veals—$2 to $6, according to quality. Mutton—$1½ to $2½. Lambs—from $1 to $2, according to quality.

COAL—10 to 18 cents per bushel.

COTTON—6 a 7 cents per lb.

COTTON YARNS.—Richmond and Manchester (Factory Prices,) Nos. 4, 5 and 6, 15; 7, 8 and 9, 16; 10, 11 and 12, 17; 13, 14 and 15, 18; 16, 17 and 18, 19; 19 and 20, 20 cents.

FEATHERS—25 a 30 cents per lb. for live geese.

FISH.—Mackerel, No. 3, $5. Herrings—Cut, No. 1, $4½ to $4½; Roe, $4½ to $5. Shad, $6 a $6½ per barrel.

HIDES.—Green, 4 to 5 cents per lb.; Spanish, 13 a 16½.

IRON.—Pig, $25 to $30; Swedes, $95 a $100 per ton; English $85 to $90; Tredegar, (Richmond manufactory,) $90; Up Country bar, $70 a $75.

LUMBER.—Clear white pine $33; refuse clear $25; merchantable $15; refuse last sale $11 a $12 per M.; one inch pine plank from $10 to $11 per M.; three-quarter inch pine plank $8 to $12; flooring $16 to $20; 3 by 4 scantling $14 to $16; joists $20; two inch plank $20; weather boarding $10 to $12.

LIME.—Sales of Thomaston at $1 per cask.

PLASTER.—On the Basin bank $4½; from wharf $3.

SALT.—Last cargo sold at $1 67 from the ship.

SOAP.—For brown 4 a 6 cts. per lb.; white and variegated 12 a 14.

STEEL.—American blistered $135 to $140 per ton.

EXCHANGE.

FOREIGN.—On London 8½ per cent. premium.

DOMESTIC.—New York Checks, par a ¼ premium.
Philadelphia, par a ¼ premium.
Baltimore, par a ¼ premium.
North Carolina Bank Notes large ½, small 1 dis.
South Carolina, 1 discount.
Savannah, 2 discount.

CONTENTS OF NO. VIII.

Rust—Prevented by the use of ashes, p. 169.
Wheat—Experiments with old seed, p. 170.
Plaster—Experiments with, p. 170.
Potatoes—Improved by removing the blossom, p. 170.
Bee Hives—Which is the best? p. 171.
Report—Of the Mecklenburg Club, p. 171.
Fish Pond—Account of Dr. Venable's, p. 172.
Eggs—To preserve, p. 173.
Tomatoes—Recommended as food for cows, p. 173.
Yard Enclosure—One described, with a cut, p. 174.
Servants—Management of, p. 175.
Soap—Directions for making, p. 176.
Hessian Fly—New theory, p. 176.
Timber—Time for cutting, p. 177.
Butter—The quality complained of, p. 177. Directions for managing, p. 178.
Form of Cattle—The *points* described and illustrated with a cut, p. 179.
Virginia Farming—Letter from Mr. Brown, p. 181.
Birds—Their value to the farmer, p. 183.
Reaping Machines—Comparative merits of Hussey's and M'Cormick's, p. 184.
Chickens—Management of, p. 184.
Horses—Proper mode of feeding, p. 185.
Original Communications—Their value, p. 185.
Seed Wheat—Should be procured from the raiser, p. 186.
Gapes in Chickens—To cure, p. 186.
Double and Single Trees—Proper form of, with a cut, p. 187.
Timber—Proper time of cutting, p. 188.
Aphorisms—No. 4, p. 188.
Bommer's Manure—p. 189.
Soap Suds—Their value, p. 190.
Comments—On the July number, p. 190.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS, Editor.

VOL. III. RICHMOND, SEPTEMBER, 1843. No. 9.

FARMERS' CLUBS.

We are much pleased to find that the benefits of *association* begin to be appreciated by the agricultural community. Annual fairs and exhibitions are well enough in their way, but they are too few and far between to be productive of any very important results. It is to the continued and repeated influence of those neighborhood associations, which, under the name of "farmers' clubs," are beginning to be so popular, that we are to look for those benefits to agriculture that all other arts and sciences have derived from the union and association of their members.

One of these clubs has been gotten up in this vicinity, and a single attendance was sufficient to satisfy us that these meetings are admirably calculated to minister not less to the sociability than the improvement of a neighborhood. To a man groaning under the heat and dust of a city, nothing can be more delightful than one of these rural excursions; where, amidst the song of birds, the odor of flowers, and the shade of trees he may enjoy the delightful hospitality of the members of the Henrico Farmers' Club.—The forenoon is devoted to social intercourse, and it is not until the cloth is removed, and the physical man fully provided for, that the spiritual being is considered to be sufficiently sublimated to take into consideration the profound truths of agriculture. Then it is, that some question selected at a previous meeting, is made the topic of conversation, and an opportunity is afforded to every member to avail himself of the experience of his friend and neighbor. It is our lot to fill the honorable post of Secretary to this Club, and from our notes we shall probably, from time to time, make a few extracts for the benefit of our readers. For instance, at the first meeting the question for discussion was,

"WHAT IS THE BEST MODE OF CULTIVATING INDIAN CORN?"

This question was handled very ably by some of the oldest and most successful corn growers in the county. Although it was universally agreed that much depended upon soil and season, yet a great diversity of opinion prevailed, upon almost every point that arose, between men living side by side, either of whom would have been considered by his neighbors good authority upon any question connected with the making of corn; particularly upon the question of the proper distance for planting, did our company essentially differ. One gentleman, whose head would have been grey, if it had not been bald, a man too of very profound observation, declared, that, one year with another, six feet by three, would yield more in our climate and soil than any lesser distance. This doctrine, which would hopelessly condemn us to a short crop, we are happy to say found very few supporters. Five feet and eighteen inches was the distance that seemed to be most generally preferred; the prevailing opinion was, that nearer than that, in ordinary seasons, the corn would "fire," and the crop would be shortened. We were pleased to hear one gentleman declare that experience and observation had perfectly satisfied him of the truth of the doctrine of Dr. Sams, of South Carolina, to which we called the attention of our readers in the last volume of the Planter. The amount of this doctrine is briefly this; that the natural tendency of the roots of the corn is downwards, and that such will be their invariable direction in a deep, rich, mellow soil, but that when the earth is scratched only to the depth of a few inches and the hard pan underneath is left undisturbed, then it is, that the roots of the corn begin to wander in a horizontal direction, and that their length will very much depend upon the distance within which they can find their proper supply of food. The inevitable and valuable conclusion from this position is, that as the soil is deepened and enriched, that we may plant closer and closer, until we obtain a crop that perhaps has never yet been dreamed of in American husbandry. Firing, say the advocates of this doctrine, is neither more nor less than dying for want of nourish-

ment. Corn, like cattle, must have something to live upon, and if your land is poor, and the season unfavorable, you must be careful that you allow sufficient latitude of range to both the one and the other. In other words, a certain degree of nutriment is required, and the corn never travels without the space in which it is afforded.

A gentleman present, whom, although a young farmer, we know to be a very skilful and successful one, remarked, that he had of late years dispensed entirely with the use of the hoe in his crop. He breaks his ground up deeply and thoroughly, leaving it as freshly stirred as possible at the time of planting: he plants early, and as soon as the growth will enable him to do so with impunity he runs the plough, with the bar close to the corn, on both sides, turning the dirt from the corn; the middle part of the rows are worked with cultivators. In a few days he puts in his ploughs again, reversing the first operation, and throwing the dirt to the corn; whereby the weeds between the plants, which are usually removed with the hoes, are completely covered and smothered. Again, and for the last time, he resorts to the cultivators to clean the rows; and he seldom or never finds any thing more necessary than the several workings here described, provided the ground is well and thoroughly broken in the first instance. . By this system and the free use of manure, he had succeeded in making an average of ten barrels to the acre upon thin, light Chickahominy upland.

The next subject worthy of note which our memoranda furnish us is

THE CURING OF CLOVER HAY.

Here again we find a diversity of opinion.—One member of the Club is an extensive and well known hay grower, and his views accordingly commanded great attention. He premised by saying, that he conceived the great object to be to cure as much with the *air*, and as little with the *sun*, as possible: his practice was, to commence cutting just when the blossoms began to turn brown; after permitting it to lie in the swath about a couple of hours, he dragged three swaths together thereby forming a winrow, in which the clover was permitted to remain twenty-four hours longer; it was then put up into large shocks, which, as soon as they were sufficiently cured, were carted to the barn or stack. These general rules were, however, much modified by the weather. There was no portion of the farmer's business that required the eye and critical judgment of the master more than the curing of clover hay. Seasons would some times come, in which, in spite of the greatest care and precaution, it would be impossible to save the crop except in a very injured condition. This gentleman stated that as good clover hay as he had ever seen, he had known to be cured by stacking it, as fast as it was cut, about two poles or rails, in such a manner, that when they were drawn out, a perfect vent would be left, by which the air might circulate freely through the stack: in this manner, the hay was soon sufficiently cured without losing a particle of its fine green color. Another gentleman here remarked, that upon the same principle he had frequently known clover in new lands to be piled upon the stumps, and he felt assured that any plan which might be used to enable the air to circulate freely through a large mass, would afford the means of curing clover hay with the least possible degree of risk or labor. Another gentleman stated, that from a friend in the county of Loudoun he had obtained the following mode, which he had practiced for several years with great success. In the evening he threw into large cocks whatever hay had been cut during the day: by 10 o'clock next morning, he would find the heap in a high degree of heat; he would then throw it open and spread it, in which state he would leave it for an hour or two, when he would proceed to stack or house it.

It was stated by another member that in the Valley of Virginia, which is as celebrated for the quality as the quantity of its hay, it was the universal practice to permit the clover to lie in the swath, as it was cut, for twenty-four hours: it was then turned bottom upwards, and thus exposed for an hour longer, when it was considered sufficiently cured to be carted to the house, where it was salted in the layer, a gallon of salt being used to about a wagon load of clover. In that section of country, it was never considered fit to be cut until at least half the blossoms had turned brown and died.

Another gentleman stated, that last year he had put in practice a plan that he had learned in Illinois, where it universally obtained. This was simply to carry the hay as it was cut and pack it green, taking care to salt the layers as it was put up. Layers of straw, if it could be

conveniently had, were interposed between the layers of hay. Although in his experiment he had lost a small portion of the bottom of his heap, in consequence of his having packed it too close by trampling, the balance was cured in a very superior manner, and he was satisfied, that when properly conducted, it was the very best and cheapest mode of curing clover hay.

The better to settle the various questions that arose both with respect to the corn and hay, particular members were selected by the Club, and requested to institute a set of experiments the next season, and report the result as soon as practicable. From the character of the individuals selected, we hope hereafter to obtain information that will go far to set at rest the contradictory opinions on these subjects, which now divide the agricultural world.

EFFECTS OF SOAP-SUDS ON CABBAGES.

I believe it will be a thankless piece of service for one gardener to teach another how to grow cabbages and cauliflowers, yet as these crops of vegetables have failed this season in various parts of the country, the following notice may perhaps, be of use to our cottage readers. Wherever soap-suds have been used plentifully, cabbages and cauliflowers have grown luxuriantly. I have made several inquiries of others who have used them, and in no one instance have I heard of a failure where soap-suds have been applied. I intend to try them over brocoli, to see if they will prevent them from clubbing. Others may do so likewise, and make known the results. Whether the alkali in the water has prevented the enemy from destroying the roots, or given the roots more vigor to resist the attack, I do not know; but one thing is certain—where such matter has been applied, it has produced the most beneficial results. I think cottagers may take a lesson from this, and save that which would nourish their languishing crop, for it is a pity to see a pool of filthy water polluting the neighborhood with its stench; while, within a few yards of it, the vegetables of a garden are dying of starvation.

Gardener's Chronicle.

COTTON AND FLAX.

The following is extracted from a letter from a friend in Lunenburg. We shall be obliged to any of our readers who will furnish the information required:

"I have been an attentive reader of your valuable paper from its earliest infancy to the present moment, but I have never seen the first hint about the cultivation of cotton or flax, two (I think) very important crops, at least, I think every farmer ought to make enough to clothe his negroes; it can be spun and wove at such times as the women could not be otherwise profitably employed. Will you get some of your numerous correspondents to give us some practical information concerning cotton and flax? and oblige, &c.

R. H. ALLEN.

TO PREVENT THE RAVAGES OF FOWLS.

On a visit lately to a friend, whose wife is an excellent manager, our attention was attracted to a device by which the lady managed to secure her flowers, to which she is devoted, from the ravages of her fowls, to which her husband and children are devoted. Around the yard enclosure, from post to post, about twelve inches above the tops of the palings, a small wire was extended. Barn-yard fowls are not very aspiring birds, and seldom attempt a flight higher than necessary to accomplish their object. The imperceptible wire, therefore, operates as a complete rebutter to their attempts to skim the paling tops, and the unexpected check forever quiets the aspiring hopes of their vaulting ambition.

This plan, which might be extended to the garden as well as the yard, is the next best we know to that of a poultry-yard, in which the fowls are constantly confined.

SWEET POTATOES FOR HOGS.

It is generally admitted, that our sweet potatoes constitute an excellent article of food for hogs, and it is well known too, that few plants yield a greater amount of nutritious matter to the acre. Heretofore, however, planters have generally neglected to avail themselves of the advantages of this crop for their stock. It is true, if the potatoes are to be dug and thrown to the hogs, the planter loses much valuable labor from his crop, at a very important season. But this is not necessary; by making the potato patch long and narrow, (say a half or a fourth acre wide,) and a few hours labor once a week in running a cross fence, a stock of hogs may be kept fat from the first of August until the pea fields are open, with very little expense.—For example, let him run a low fence across, so as to cut off a small portion of the patch and turn his hogs on this. While they are consuming the vines and roots on this portion, the potatoes in the other part are still growing undisturbed. When this portion has been eaten out entirely, let the planter have his cross fence

moved up a little farther, and thus give his hogs access to a fresh portion of the potato field.—This plant, we think, commends itself to the attention of planters on several accounts. The cheapness of the food; its being ready for use at an important season for pushing forward young hogs, (and nearly every southern planter kills his hogs young,) the greater amount of pork it enables him to raise, and the less corn it requires in the fall to make his hogs fully fat.—And we may add to these, that every hog is thus made to gather his own harvest. The cheapness of this article of food, (when the labor of harvesting is saved,) certainly cannot be questioned. For from two to four hundred bushels of roots, besides the vines, per acre, is no small amount of nutritious matter for the labor bestowed in culture. If any one needs to be convinced that August is an important month for pushing forward hogs that are to be killed in the fall, let him try to fatten a very poor hog; he will eat more than his bacon will be worth. And, in fact, a year old that has been kept poor until the pea fields are open, will yield very little bacon. This plan enables the planter to keep his hogs fat and growing rapidly from the first of August until killing time. For by the time the potatoes are fully eaten out, the pea fields may be opened, and by the time they are done and the hogs confined ten days on corn, to harden the fat, the weather will probably be cold enough to kill. And here another advantage is gained. For the most successful curers of bacon we know, all agree that the earlier you can kill your hogs, the surer you are to have your bacon free from bugs in the summer.—*Planter.*

GUANO.

Upon the South American shore of the Pacific Ocean and the adjacent islands, is found a substance called GUANO, which is supposed to be the accumulated dung of birds, that in countless myriads range that extensive coast, seeking their prey in the finny tribe of the great ocean. The fertilizing effects of the article are well known to the Peruvians, and have induced its transportation six thousand miles to the shores of England. Occasionally for the last twenty years, a ship load would find its way to the English ports, and although, perhaps, the production is too limited, and the cost of transportation too great, to permit it ever to become an extensive article of commerce, its extraordinary fertilizing properties render it a subject of extreme interest to the inquiring agriculturist. It sells in England for about five dollars the hundred weight, and from two to four hundred weight is used to the acre. One bushel is reckoned to be equal to thirty or forty of the best rotted stable dung. This product has been analyzed, and its constituents have been found to consist of those salts, which modern discovery has shown to be most instrumental in aiding the growth of vegetable products. Indeed, so exactly does this substance seem adapted for the purpose to which it is applied, that an attempt has been made to produce it by an artificial combination of its constituents; and it is yet hoped that this attempt will lead to a chemical composition, that will afford us an artificial manure with all the properties of the guano, at a much lower price than the natural product can be imported. When this article is fresh, it is said to be of a light greyish color, but exposure soon gives it a brownish cast. It probably only excels the dung of our pigeons and domestic fowls, because of the animal food from which it is elaborated. A ship load of guano was lately brought into the port of Baltimore, where it was sold at seven cents a pound; a friend, who happened to be in the city at the time, was kind enough to bring us a little box of it, a part of which was applied to some geraniums and other plants by way of experiment. Much as we had heard of its marvellous effects we were astonished at the magical result upon our flower bed.

We are yet groping in the dark upon the subject of agriculture, but a spirit of inquiry is awakened that we are satisfied will never slumber until the most astonishing and most satisfactory results are obtained.

From the Farmers' Cabinet.

FLORICULTURE.

An intelligent friend, long accustomed to the pursuits of floriculture, and remarkably fortunate in raising plants from seed and cuttings, attributes his success, in a great measure, to the plan he has invariably adopted, which is, to keep his plants as near the level of the ground as possible; the windows of his kitchen affording him the best situation for striking cuttings, &c.; after which come his parlor windows, and then those of his first floor; but above this, his plants never flourish. And the cause for this, he considers perfectly plain and natural; for at, and near the surface of the earth, there is always a degree of moisture floating in the atmosphere; but above, it is wanting; while the altitude of a third story, or an attic, is dry and unfriendly to vegetation.

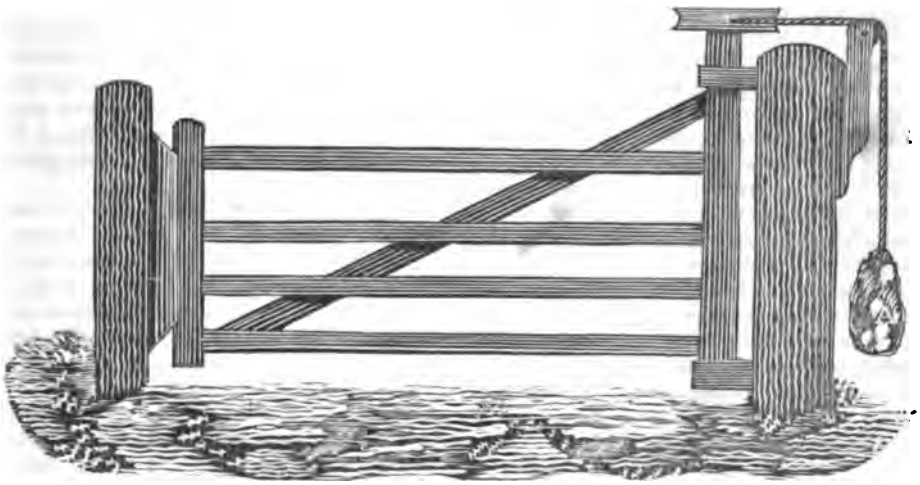
When the season arrives for the removal of

his plants from the house to the open air, he is careful not to set the pots on bricks or a pavement, for these are continually extracting moisture from the earth in the pots, and in hot weather the roots of the plants are thereby scorched and dried up. He places them on the earth, and in watering, pours some between them, and thus the pots are kept moist and cool during the hottest day. It is a fact, that no where have I seen finer plants than his; nor do I know any one who can raise them with such certainty and with so little trouble or difficulty: and believing that the hint may be valuable to many of your readers, particularly to those whose labors in floriculture are chiefly confined to the house, it is communicated, in the hope that they will reciprocate, if in their power so to do.

S. DALE.

For the Southern Planter.

GATE.



Mr. Editor,—You have furnished us a great deal of valuable practical matter in the "Planter" upon the subject of gates, but I do not think you have quite exhausted the subject, and therefore beg that you will re-publish the cut and description that I have marked in the number of the "United States Farmer," that I got from your office a few days since. I think the principle an admirable one, but will be glad if you will accompany the article with such comments as your better judgment may suggest.

Your obedient servant,

A. G. S * * * * *.

We have turned to the article referred to, and complied with the request of our correspondent by putting the cut in the hands of the engraver. "A circular piece of plank six or eight inches in diameter, grooved after the manner of a pulley wheel, is nailed or firmly attached horizontally to the top of the heel post of the gate, in such a manner that its centre shall be exactly in the axis of the gate. To the inner side of this circular piece, (the gate being supposed to open outwards,) in the groove, a rope or chain is attached, which passes over a small pulley fastened to the back part of the gate post, suspending a weight sufficient to swing the gate together. It is evident, that if the circular piece be six inches in diameter, the gate may be opened to its fullest extent without raising the weight more than a foot."

This is an ingenious, although not entirely novel arrangement; we have seen the same plan adopted for small yard gates, where it works very admirably, and certainly is the neatest and least inconvenient form in which a weight can be applied to keeping a gate shut. In a farm gate, a latch would also be necessary to prevent stock from pushing it open. But the weight here answers a double purpose; it not only keeps the gate shut, but it balances the gate and tends to keep the heel post in an upright position; so that if the balance of the

gate is securely braced to this post, it will be prevented from swagging. We have no doubt it is well worthy the farmer's attention.

EXPERIMENTS IN COAL ASHES.

We applied coal ashes in the drill, mixed with the soil, for turnips, on a moist, clayey soil, and the crop in drills thus dressed was nearly twice as much as in drills without any dressing. For each peck of ashes we got nearly three pecks extra turnips. Our memorandum is not at hand, but we think about one peck was applied to a drill about three rods in length. The effect was precisely like that of wood ashes. We used coal ashes, plaster, and salt, mixed on a light, gravelly soil, for turnips, and they increased the crop nearly one half. Which ingredient was most beneficial, we know not. We used coal ashes on a light sandy soil for potatoes, and perceived no effect, excepting the potatoes were more smooth, being protected from the worms.

A gardener once showed us the effects of coal ashes. He had potatoes very fair and smooth in a garden where they used to be much injured by the worms before the use of ashes. He found that the grass grew in and around a path which was a disadvantage in wet weather, or when the dew was on, and to prevent this he covered the path a few inches deep with coal ashes, and in consequence the grass grew far more luxuriantly than before. In a low place coal ashes had been thrown to fill up, till it was fifteen or eighteen inches deep; in this soil, composed wholly of coal ashes, potatoes and beans were growing very luxuriantly.

Boston Cultivator.

LIME.

Doctors DANA and JACKSON, of Massachusetts, both of whom are celebrated for their attainments in agricultural chemistry, have undertaken to respond to some inquiries, from an anonymous writer, as to the action of lime upon the soil, and especially as to its agency in preventing the growth of sorrel. They both express the opinion that when properly applied it neutralizes the acid from which the sorrel springs. Dr. Dana says, that when the lime bears only a small proportion to the acid, a super-oxylate is formed that rather promotes than prevents the growth of sorrel. When a thick coating of lime, even a pile, is laid *on the surface*, but a small portion of it enters the soil and unites with the acid, probably just enough to form the super-oxylate and promote the growth of sorrel; consequently, it is not surprising to see sorrel growing luxuriantly through such a pile.

From Dr. Jackson's remarks upon this subject, we make the following extracts:

"It is not contended that lime alone is capable of conferring fertility upon a barren sandy plain, or that it will meet every possible case. It will, however, do much more than is generally known, when employed in a proper manner, by skilful hands. Its principal use with the farmer should be as a chemical agent in decomposing his composts, so as to render them fit for immediate use. I have advised the farmers generally in this primary region, so poor in calcareous matter, to mix into their composts of peat or swamp muck and barn-yard manure, which have stood one winter, a bushel of recently slacked lime to a wagon load of the compost, while digging it over in the spring, preparatory to spreading it on the soil. So far as I have heard, the result of this experiment has been universally favorable, and in all the cases where I have personally directed the operations, it has proved satisfactory. A much larger proportion of lime may be advantageously employed than what I have above mentioned, but even that small quantity produces a very good effect.

"Top dressing with lime is liable to many objections, which do not present themselves when the lime is put into the compost, and thus at once neutralized. Top dressing with lime requires several years to make manifest its action, and it is not certain to act favorably, unless there is already a sufficiency of organic manures in the soil, for it to act upon.

"So long as lime is attracting carbonic acid from the atmosphere, it must act unfavorably on growing plants, but when this ceases and the acids generated in the soil by the decay of vegetable matters begin to act on the carbonate of lime, then a very favorable influence is perceived, from the disengagement of carbonic acid gas, and the formation of the organic acid salts of lime.

"Owing to this fact being overlooked, we have had much erroneous statistics on the use of lime as a manure, or amendment."

GAPES IN CHICKENS.

The following is an extract of a letter received from a friend in Caroline:

"In writing to you, it will probably not be amiss to communicate a fact which will be of some interest to *the lovers of fried chickens*.—Some of my neighbors have entirely prevented, and others have speedily cured that destructive malady, the gapes in their chickens, by mixing a small quantity of spirits of turpentine in their food. From five to ten drops, added to a pint of meal to be made into dough, are the proportions used. I have no doubt of the universal

and certain success of the remedy, relying, as I do, upon the character of those who have communicated it to me.

Yours, BENJ'N ANDERSON."

TO PREVENT DECAY OF WOOD.

Take twelve ounces of rosin and eight ounces of roll brimstone, each coarsely powdered, and three gallons of train-oil. Heat them slowly, gradually adding four ounces of beeswax, cut in small bits. Frequently stir the liquor, which, as soon as the solid ingredients are dissolved, will be fit for use. What remains unused, will become solid on cooling, and may be re melted on subsequent occasions. When it is fit for use, add as much Spanish brown, or red or yellow ocre, or any color you want, first ground fine in some of the oil, as will give the shade you want; then lay it on with a brush as hot and thin as you can; some days after the first coat is dried, give it a second. It will preserve plank for ages, and keep the weather from driving through brick-work. Common white paint may be used on top of it, if required, for the sake of appearance. Two coats should always be given; and in all compound machinery, the separate parts should be so varnished, before they are put together; after which, it will be prudent to give a third coating to the joints, or to any other part which is peculiarly exposed to the action of moisture; such as water-shoots, flood-gates, the beds of carts, the tops of posts, and all timber which is near, or within the ground. Each coat should be dry before the parts are joined, or the last coat applied. The composition should be applied when the wood is perfectly dry. It is necessary to mention that compositions made of hot oil, should, for the sake of security, be heated in metalic vessels in the open air. For when oil is brought to the boiling point, or 600° of Fahrenheit, the vapor catches fire; and though a lower degree of temperature should be used in this process, it is not always possible to regulate the heat, or to prevent the overflowing of the materials; in either of which cases, were the melting performed in a house, fatal accidents might happen.—*Archives of Useful Knowledge.*

CULTIVATION OF THE RASPBERRY.

The plants are frequently set out in light and poor soils, crowded together, left untrimmed, choked up with a profuse growth of weak stems, and what little fruit they produce is nearly dried up, from the arid situation in which they are placed. On the contrary, in cool, deep, and moist soils, in a sheltered and partially shaded place, the plants throw up suckers to the height of six or eight feet, and produce a profusion of large, handsome, and well flavored berries. So well assured are the most eminent English cultivators of the raspberry, of its love of a cool and moist soil, that some writers have strenuously recommended the use of bog earth and rotten leaves, in the place of the richest loam. We are well assured that the many complaints which are made of the meager produce of many raspberry plantations may be attributed wholly to the light and droughty soils in which they are often planted.

A cool aspect is of material consequence, and to secure this the north side of a fence or trellis, which will form a screen from the sun, is the most favorable; on the north side of a shrubbery or row of fruit trees is also a suitable place. If neither of these situations is to be had, an open spot in the garden may be chosen, always being careful to avoid the south or east side of a fence. A temporary shade may be effected in the open garden by planting a row of running beans on the south side.—*Hovey's Mag.*

For the Southern Planter.

Richland, July 27, 1843.

Mr. Editor,—In conformity with a resolution of the joint meetings of the two agricultural clubs of Mecklenburg County, I transmit to you for publication a copy of the proceedings of their first annual meeting, held on the 4th of July, at Cabin Point.

With many good wishes for the success of your valuable paper, and for the cause of agriculture,

I am, very respectfully,
Your obedient servant,
HENRY E. LOCKETT.

Cabin Point, July 4, 1843.

At a meeting of the two agricultural clubs of Mecklenburg County, held this day, pursuant to a previous arrangement, on motion of Richard Boyd, Esq., A. C. Morton was called to the chair, and H. E. Lockett appointed Secretary.

After the meeting was duly organized, the President, Anderson C. Morton, *rose*, and in his peculiar, and forcible style, delivered to an attentive audience an address, characterized throughout with sound and practical good sense and a thorough and intimate knowledge of the subject on which he treated.

It may with truth be said that they were fortunate *indeed*, who had so good an opportunity of being profited by his experience as an agriculturist, and his ability as a writer.

On motion it was resolved, *unanimously*, by the two clubs, that the President be requested to forward a copy of his address to the Editor of the Southern Planter, and that he be requested to publish it.

On motion, *Resolved*, That Dr. Tingnal Jones, Hon. William O. Goode, Capt. H. E. Lockett, Richard Boyd, Esq. and Richard Russell, Esq., be appointed a Committee to draft an address to the Farmers and Planters of Mecklenburg, respectfully requesting and urging them to form agricultural clubs or associations for the purpose of promoting the improvement of the land, and all the interests of agriculture, and inviting them to unite with us in our annual meetings, and in such other efforts as may be deemed necessary for the advancement of these objects.

On motion of Dr. Jones,

Resolved, That the President be added to the Committee.

In accordance with the above resolution the Committee, after retiring a short time, presented themselves, and through their chairman, A. C. Morton, reported the following address, which was adopted:

To the Farmers and Planters of Mecklenburg:

Gentlemen,—The undersigned have been appointed a Committee to address you on a subject they deem of general interest and importance. A few of your fellow-citizens have associated themselves in *clubs* for the purpose of promoting agricultural improvement, and they flatter themselves that their plan, if carried generally into effect, will be of great practical utility. The clubs contain each a dozen members, who hold monthly meetings on the farms of the members, and dine always at the house of the member on whose farm they meet. At these meetings they inspect the farm, applaud what they consider praiseworthy, condemn what they regard as erroneous in practice, and discuss such agricultural subjects as may be agreed on or brought incidentally before them.

This plan is well calculated to inform the members as to the best modes of cultivation, and of managing all the various departments of the farm, and to promote those social feelings which ought to be cultivated in every neighborhood. We are well persuaded that no more efficient plan could be put in operation, and we have reason to believe that although our existing clubs are but of recent origin, good has already been effected by them. We are desirous to see the attention of the agriculturists of every section of the county directed to these important objects, and respectfully invite them to form similar clubs, and unite with us in our annual meetings and such other efforts as may be deemed best calculated to promote the objects in view.

We deem it superfluous to use arguments to prove, that the situation of our portion of Virginia requires united efforts in the cause of agriculture. Every field proclaims in language stronger than any we can use, the necessity of exertions to stay the hand of the destroyer. We are favored by Heaven with a naturally fruitful soil, a healthy and delightful climate, and every other natural advantage to stimulate us to exertion.

All that is wanting is to rouse the people to examine into this subject and make such efforts as its importance merits, and the tide of improvement will roll in its fertilizing waters until every waste place shall become as a garden, and "the desert bud and blossom as the rose."

Come up, then, gentleman, and give us the "right hand of fellowship," in this cause. We shall be delighted to hear of the institution of clubs all over the county, and shall hail them as harbingers of the rapid improvement of agriculture throughout its borders, and would gladly meet all such clubs in general meetings, to be held annually on the "fourth day of July," and unite with them in every measure that promises to promote the improvement of our soil, and the advancement of the general interests of agriculture.

The two clubs here assembled, through us invite and urge you to form your clubs, and will hold themselves in readiness to meet you at any central point that may be agreed on, and concert such measures as may be deemed of general interest by such annual meetings.

TINGNAL JONES,
WILLIAM O. GOODE,
HENRY E. LOCKETT,
RICHARD BOYD,
RICHARD RUSSELL,
A. C. MORTON,
} *Committee.*

Cabin Point, July 4, 1843.

On motion of Mr. Williamson,

Resolved, That the records of the proceedings of each club, with the reports of investigating committees for the ensuing year, be produced at the next annual meeting for general inspection.

On motion of Mr. Haskins,

Resolved, That Capt. Henry E. Lockett be appointed to read the Declaration of the American Independence, and that the Hon. William O. Goode be invited to attend and deliver an address at the next annual meeting.

On motion of Mr. Richard Boyd,

Resolved, That a copy of the proceedings of this meeting be transmitted to the Editor of the Southern Planter, with the request that it be published.

On motion, the meeting adjourned, to meet at this place at 10 o'clock on the 4th day of July, 1844.

A. C. MORTON, *President.*

HENRY E. LOCKETT, *Secretary.*

This is certainly a most novel and interesting mode of celebrating the fourth of July, and to a community of farmers none could be more appropriate. We can scarcely resist the desire we

feel to comply with the request of the Club, backed as it is by the intrinsic excellence of the production, to give Dr. Morton's address entire to the public; but the nature and limits of our work admonish us that we must be content to confine ourselves to such portions of this eloquent production, as are most strictly of an agricultural character. Upon the benefit of agricultural association the Doctor with great point and force, remarks:

"All great objects are effected by similar combinations. Would you construct a railroad, open a canal, establish a bank, your individual contributions would be brought up to raise a fund for the purpose, and what individual strength could not accomplish, your collective force would easily achieve; and each individual would share in the profits in proportion to the amount of his investment. But in agricultural associations, when each one contributes his mite of information, we have at once a common fund or capital, whence each one may not only draw the whole amount of his investment, but may appropriate to his own use the whole capital stock of the whole company, and yet leave that capital not only undiminished, but rapidly augmenting.—We must not be content to appropriate this valuable capital to our exclusive use. Sharing it with our neighbors and countrymen cannot exhaust it; like the widow's cruise, the more we dispense from it, the more rapidly will it be replenished."

To arrest the tide of emigration, the Doctor makes the following eloquent appeal:

"Emigration, like a blight, has thinned our ranks. What but bad tillage and neglect of our lands has entailed this evil upon us? The father, as a consequence of the destructive abuse of his native soil, seldom enjoys the reflection, that the home of his youth, of his manhood, and of his old age, is to be the home of his offspring, or that the bones of the generation that succeeds him, who have been his solace in life, in death, will repose by his side. Too often, alas! he finds that his own reckless waste of his patrimonial soil has driven them even in his lifetime to seek in the wilds of the West an asylum from poverty and want, and in all probability, whilst they wander there, the last sad offices due from his beloved ones, are left to stranger hands. This should not be. Thus has Virginia been robbed of her hardy yeomanry and the brightest gems and flowers of her population to fill up other lands, to people other nations; her glory has departed with them; while her spacious fields, her widening deserts, where howl the wolf and herd the wild deer, might still have been the home of her departed sons.

"Shall this unhappy state of things continue? Shall the plea of necessity still carry off those who might adorn the public or the private station? Shall the listening senates of other lands admire and applaud, while their halls ring with the eloquence of Virginia's expatriated sons?—Shall the young West cast the world in shade by the greatness of her statesmen and the brightness of her historic page, and all this at the expense of this their mother country; and shall nothing be done to stay the destructive tide? Improved modes of agriculture might have prevented this; the tide may yet be rolled back. It is you and such as you; it is the patriot hearts of Mecklenburg, of old Virginia, that must come up to the rescue. It is the cause of our country, of our public and private interests, of our native soil, of our beloved old Commonwealth. The happiness of the family circle, of the social bond, is at stake. Let family then unite with family, friend with friend, farmer with farmer, club with club, in the great work. Our lands still possess the elements of fertility; they are only crippled, not killed. Industry and enterprise, guided by intelligence and skill, with the stimulating the enlightening, the reviving influence of social combinations, will do much towards the great work of restoring them to their original fertility, and raising the Old Dominion again to her high and enviable position among the nations of the earth. Ought not every patriot to aspire to this? Should not every good citizen labor for it? I may be deemed an enthusiast in this interesting subject, but I glory in such enthusiasm.

"My grey hairs admonish me that I am growing old, but I hope to live yet long enough to see, under the influence of the redeeming spirit of the age, guided by the intelligence and enterprise of the great body of our agriculturists, this whole county clothed in new garments; the meadow, instead of the broom field, fattening grasses for pasturage, instead of the poor and impoverishing natural weeds and herbage, and the merry whistling ploughman coming home at eve rejoicing in the prospect of the plenteous fruits of his labor, instead of the dull, cheerless wight, who is ever haunted with dreams of cattle on the lift, jaded teams, and starvation, or the West.

"We have seen in the progress of the last five or six years ample encouragement to press on. I, for one, will not be discouraged. I am resolved to do all I can, not only at home, but wherever I go, in forwarding the great work of improvement, and I feel assured, gentlemen, that you will join heart and hand with me in this laudable pledge, and that you, equally with me, look forward to the day when our fields shall bring, instead of three, four and five for one, some thirty, some sixty, and some a hundred for one."

If every neighborhood could boast of an individual possessed of the intelligence, the zeal, and the warm-hearted devotion of the author of this address; of one, who would strengthen his precept by example, and by ocular proof demonstrate the advantages of an improved system of husbandry, how easy would it be to satisfy the public mind that the hidden resources of our State, much as they have been wasted, are not yet exhausted, and that upon no portion of the world has Providence more liberally bestowed its bounties, than upon the land of our nativity.

CURE FOR WHAT IS CALLED A RUN-ROUND ON THE FINGER.

That disease of the finger or toe, which is commonly called a run-round, may be easily cured by a remedy so simple that persons who have not tried it are generally incredulous as to its efficacy. The first symptoms of the complaint are heat, pain, swelling, and redness at the top of the nail. The inflammation, if not checked very soon, goes round the whole of the nail, causing intense pain, accompanied by a gathering of yellow matter, which, as soon as it appears, should be punctured or opened by a needle, not waiting till it has extended its progress; otherwise the finger will become excessively sore and intolerably painful, and the nail will eventually come off. All this may be prevented at once, if as soon as the swelling and inflammation begin, the finger is laid flat on a table, and the nail scratched all over (first lengthways and then crossways,) with the sharp point of a pair of scissors or of a penknife, so as to scratch up the *whole* surface of the nail, leaving it rough and white. This little operation will not give the slightest pain, and we have never known it fail in stopping the progress of the disease; all symptoms of which will disappear by next day. We have proved its efficacy *by experience*, and believe that every person who has tried it has found it a positive cure, if done before matter begins to appear; and even then it will generally succeed if that part of the gathering which has assumed a yellow color is first opened with a needle and the nail afterwards thoroughly scratched *all over* with the point of the scissors.—*Miss Leslie.*

PROGNOSTICATIONS OF THE WEATHER.

A friend of ours, a captain in the United States navy, has handed us the following table for foretelling the weather, which he says he has consulted for twenty years in different latitudes in America, and has generally found it to be relied upon. It was originally composed by that eminent astronomer, the elder Herschel, and added to somewhat by the late Dr. Adam Clarke. A knowledge of the weather a few days in advance, is of considerable consequence to the farmer, and especially during harvest-time; and we should be glad if our readers would make their observations in accordance with these tables, and give us any information that they may happen to possess on this interesting topic.

A TABLE FOR FORETELLING THE WEATHER, THROUGH ALL THE LUNATIONS OF EACH YEAR, FOREVER.—This table, and the accompanying remarks, are the result of many years' actual observation; the whole being constructed on a due consideration of the attraction of the sun and the moon, in their several positions respecting the earth, and will, by simple inspection, show the observer what kind of weather will most probably follow the entrance of the moon into any of its quarters, and that so near the truth, as to be seldom or never found to fail.

If the new moon, the first quarter, the full moon, or the last quarter, happens	IN SUMMER.	IN WINTER.
Between midnight and 2 in the morning,	Fair.	Hard frost, unless the wind be south or west.
Between 2 and 4, morning,	Cold, with frequent showers.	Snow and stormy.
Between 4 and 6, morning,	Rain.	Rain.
Between 6 and 8, morning,	Wind and rain.	Stormy.
Between 8 and 10, morning,	Changeable.	Cold rain if wind be west, snow, if east.
Between 10 and 12, morning,	Frequent showers.	Cold, and high wind.
At 12 o'clock, at noon, and 2, P. M.	Very rainy.	Snow or rain.
Between 2 and 4, afternoon,	Changeable.	Fair and mild.
Between 4 and 6, afternoon,	Fair.	Fair.
Between 6 and 8, afternoon,	Fair, if wind northwest. Rain, if south or southwest.	Fair and frosty, if wind north or northeast. Rain or snow, if south, or southwest.
Between 8 and 10, afternoon,	Ditto.	Ditto.
Between 10 and 12, afternoon,	Fair.	Fair and frosty.

Observation 1. The nearer the time of the moon's change, first quarter, full, and last quar-

ter, are to midnight, the fairer will the weather be during the seven days following.

2. The space for this calculation occupies from ten at night till two next morning.

3. The nearer to midday or noon, the phases of the moon happens, the more foul or wet weather may be expected during the next seven days.

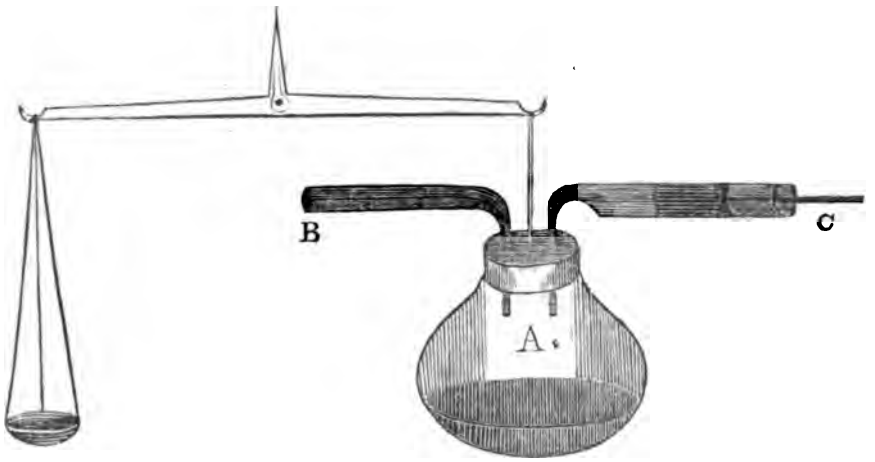
4. The space for this calculation occupies from ten in the forenoon to two in the afternoon; these observations refer principally to the summer, though they affect spring and autumn nearly in the same ratio.

5. The moon's change in the first quarter, full, and last quarter, happening during six of the afternoon hours, that is, from four to ten, may be followed by fair weather; but this is mostly dependant on the wind, which is noted in the table.

6. Though the weather, from a variety of irregular causes, is more uncertain in the latter part of autumn, the whole of winter and beginning of spring, yet, in the main, the above observations will apply to those periods also.

7. To prognosticate correctly, especially in those cases where the wind is concerned, the observer should be within sight of a good vane, where the four cardinal points of the heavens are correctly placed. With this precaution he will scarcely ever be deceived in depending on the table.—*American Agriculturist.*

APPARATUS FOR TESTING MARL.



Since the value of marl has been so clearly demonstrated, especially in its effects upon the lands in lower Virginia, beds of this important fertilizer have been esteemed, and in some instances have proved, to be more valuable than the gold mines which were so much sought for a few years ago. But as the value of the latter was found to depend very much upon the gold they contained, so the marl beds are entirely dependent upon the proportion of lime that is imbedded in the clay; this proportion is only to be ascertained by chemical analysis, and is sometimes so small as to afford a very poor recompense for the labor of digging and hauling. It is very desirable, therefore, to furnish the owner of every marl bed with the means of testing its value before he incurs the labor and expense of putting out; this we think is effected in the simplest and most exact manner by means of the apparatus described in the following letter from Professor Rogers, now of the University of Virginia, to the former Editor of the Farmers' Register:

William and Mary College, June 27, 1834.

The apparatus which I am about to describe is intended to give greater accuracy and facility to the usual process for determining the quantity of carbonic acid in marl, or in any of the carbonates. By the common method, the two vessels containing severally the marl and the muriatic acid are placed in one of the scales of a delicate balance, and there counterpoised by

weights put into the other scale. The acid is then poured upon the marl, and, after all the carbonic acid has been discharged, the equilibrium is restored by adding weights to one, or abstracting them from the other scale. In principle, this method is entirely free from objection, but as usually conducted, it cannot be relied upon as accurate. This want of precision arises in the first place from the escape of aqueous vapor, along with the carbonic acid which is discharged, thus making a greater weight necessary for restoring the equilibrium than is due to the quantity of carbonic acid which has escaped—and secondly, from the greater weight of the vessels containing the marl and acid impairing the sensibility of the balance, and thus rendering it impossible to estimate the carbonic acid to small fractions of a grain. The first of these objections has long been obviated in the chemical analysis of the carbonates, by causing the gas as it escapes to pass through a tube containing dried muriate of lime; and the latter has been in some measure removed by a contrivance of the great practical chemist, Rose; which, however, as it is inconvenient and uncertain in the manipulation, I shall not here describe.

The apparatus which I have devised is, I think, free from these objections, and enables the operator to proceed with great accuracy and despatch. It has the advantage of being very easily constructed, and of being used with a balance that can be procured at a very moderate price. Moreover, the quantity of marl which is necessary for experiment in no case exceeding ten grains, specimens for analysis may very easily be forwarded by letter.

The balance which I use with this apparatus is a small goldsmith's balance, such as may be procured for a few dollars in New York. It is very light, and turns, when unloaded, with the one-hundredth of a grain. My set of weights, obtained from Millington, in Philadelphia, extends to tenths and hundredths of the grain.

The accompanying figure will convey a distinct idea of the apparatus and mode of using it. One of the scales is removed, to admit of suspending the apparatus by a double thread over the hook of the beam. The other is made of something light, as a piece of card. In this way all unnecessary weight upon the beam is avoided, and its sensibility preserved.

A, is a light bulb of glass, blown very thin, from a common piece of tube, and about one inch in diameter. A cork is fitted to its mouth, and through this the tapered ends of the bent glass tubes, B and C, are passed air tight; the extremity of the latter extending some distance into the vessel. The tube B, through which the gas escapes, is filled with fragments of muriate of lime. The tube C, which contains the muriatic acid, is furnished with a light piston of cork or cotton, in the centre of which is fixed a rod or handle, made of a small stiff straw.—This instrument, when charged with marl and acid, does not weigh more than 120 grains.—The whole load of the beam is, therefore, 240 grains, and it is still sensible to the one-hundreth of a grain.

The mode of proceeding with the analysis is as follows:—Five or ten grains of the finely powdered marl is introduced into the vessel A, and then two or three drops of water added, to assist the diffusion of the acid. The small end of the tube C, now removed from the cork, is dipped into some muriatic acid in a wine glass, and the piston moved backwards and forwards until the necessary quantity of acid has been drawn in. The tube is then replaced in the cork, and in this state the instrument is counterpoised by weights in the opposite scale. The piston being then gradually forced in, the acid is injected drop by drop upon the marl, and the gas escapes by the tube B, depositing the aqueous vapor in its passage on the muriate of lime. Allowing the apparatus to rest until the gas has entirely escaped, and the decomposition is complete, the equilibrium is restored by placing weights upon the clear top of the cork, or by removing weights from the scale. In this way the weight of the disengaged gas is accurately determined, and the proportion of carbonate of lime thence computed.

An analysis of a specimen of marl from James City, just completed, will serve as an illustration of the method. Ten grains of the finely powdered marl were introduced with a little water into the vessel A; the instrument was then charged and equipoised. The acid being injected, the whole was allowed to rest for an hour. The weight lost was 2.91 grains. Increasing this in the ratio of 44 to 100, gives 6.61 grains of carbonate of lime in the 10 grains of marl—or almost precisely 66 per cent.

The frequent calls upon me for the analysis of specimens of marl, first led me to the construction of this apparatus, and I have since found it so convenient and accurate, that I can recommend its adoption to such of your readers as may have a taste for chemical inquiries connected with agriculture. Any ordinary worker in glass will construct the instrument, and skill in manipulating with it may be soon and easily acquired. WM. B. ROGERS.

The farmers who are using marl will be greatly indebted to Professor Rogers for the convenient and cheap little apparatus above described—which, judging from his description, not only furnishes the cheapest and most convenient, but likewise the most accurate mode of analysing calcareous manures. It may be easily constructed by any worker in glass—so easily, indeed, that Mr. Rogers made his own by the

heat of an Argand lamp, using a few common glass tubes as materials. Every farmer who uses calcareous manures ought to have some means for testing their strength, and this seems to be completely within the power of all to obtain, and to make use of, with very little attention. But, though the process as above described is sufficiently plain to all who have the slightest knowledge of the chemical properties of the substances used, it may appear unintelligible to others; and, therefore, we hope that the following explanations may be pardoned by those to whom they are altogether useless.

The principle upon which the apparatus works is the same as that of the more expensive and complicated apparatus of Davy, (described in his Agricultural Chemistry,) which we have heretofore considered the best—that is, by separating and ascertaining the weight of the carbonic acid combined with the lime of the manure. Every hundred grains of calcareous earth, or carbonate of lime, is composed always of similar proportions of lime and of carbonic acid—which proportions, by weight, are 56 parts of lime, and 44 of carbonic acid. Of course, if we know how much weight is lost in 100 grains of earth, partly of carbonate of lime, (as marl,) by driving off its carbonic acid, the rule of proportion will show what was the amount of carbonate of lime contained in the sample of earth.

When the muriatic acid reaches the earth in the bulb, it immediately combines with the lime by its greater attraction, and the weaker carbonic acid is disengaged in the form of gas, and escapes into the air through the tube containing the dry muriate of lime—which substance attracts moisture so powerfully as to retain all that might otherwise pass out with the gas.—The same muriate of lime will serve for many experiments, as by being heated in the tube its dryness is restored previous to every trial. This salt is formed by the combination of muriatic acid with lime, and therefore every experimenter may provide it for himself by filtering and evaporating the fluid left in this process of decomposing carbonate of lime.—*Ed. Far. Register.*

AGRICULTURAL MACHINES.

Having had some experience in the construction of machinery for manufacturing operations, and having felt the advantage resulting from its use, we have labored hard to extend its beneficial influence to the sister art of agriculture.—This we have found an uphill business; but this must be done; nice mechanical implements and labor-saving machines must become much more common than they are, before the same excellence can be obtained in the art of agriculture that marks the march of intellect in other professions. We are frequently told, this is all true, but it is impossible to adapt negro labor to the use of complicated machinery. This has been so often said, that it is generally believed, and yet we are sure nothing is more erroneous. We have seen one of the best conducted cotton factories in this country in which the operatives, nearly all negroes, work at machinery of the most delicate and complicated construction. The superintendent even prefers them, on account of the better discipline he is enabled to establish, to whites. Do they understand the operation they are guiding and superintending? Not a bit of it, either black or white. There is more talent concentrated in one of those moving, breathing implements, than their brains could comprehend in a lifetime. Had he been restricted to the production of such machinery as would be comprehensible to either a booby negro, or a common white laborer, the spinning jenny would have slept forever in the brain of Arkwright, from whom it sprung.—What, then, is the machine so perfect that it never gets out of order, or is it so endowed with intellect that it corrects itself? Not exactly, although this seems to be pretty much what the farmer requires in the implements made for his use. But in every well conducted manufacturing establishment, there is, or there is supposed to be, an intelligent superintendent, who understands thoroughly the principles of all the machines at present employed in his line of business, and readily acquires a knowledge of any improvements that may be made in the same.

We have been mortified, and almost vexed sometimes, when we would be taking pains to explain to a gentleman and man of education what we conceived to be the beautiful principle of some agricultural implement, to have him tell us, that he would send his man Jim to look at it, as he knew a great deal more about such things than he did. Again, we are frequently told, this implement, or that machine, may do well enough for a northern farmer but it will never do for our *negroes*. Now we think there is a little mistake in this matter; the proposition should have been stated thus; that implement is a capital thing for a northern farmer, who will teach his men how to use it, and who sees in person that they take care of it, but it is not worth my while to buy it, to place it, as I should, in the hands of my negroes to be dis-

posed of as they think best. A gentleman was looking at a hay-fork in our wareroom, a few days since, with which he seemed much pleased; but, says he, if I were to give it to my negroes one day, they would probably throw it down and run the cart wheel over it the next; then, said we, in all sincerity, you are better without it. But this single remark was sufficient to let us into the character of our visiter: he was undeniably and unqualifiedly a bad manager; if his negroes are as careless as that, they are badly managed; it is impossible he can be supplied with good tools, to say nothing of labor-saving machinery; if he is without good tools, his operations are of course poorly performed, and if he lives by his occupation, it is only because it is of that generous nature that it affords its followers a support, when most abused. Now suppose a careful northern man were to lay out his money one day in an implement, and one of his hirelings should run a cart wheel over it the next, what would be the consequence? Why the careless fellow would instantly be dismissed, and the price of the tool be deducted from his wages; the certainty of this result and the fear of punishment makes him careful.—Would not the same system produce the same effect with the negro? If punishment invariably follow the offence, the offence will be very seldom committed by either white or black; and the difference is in the character of the masters, and not in that of the operatives, as is generally charged.

The fact is, if more order, and system, and management are not introduced amongst our laborers, (it matters not about their color,) notwithstanding our manifold advantages of soil and climate, we must be content to lag behind our less favored brethren in the art of agriculture. The application of labor-saving machinery characterises the practical spirit of the age: these inventions, which are now being translated from the sister arts to agriculture, and which are destined to introduce a new era in the history of the profession all require order, system, and discipline for their practical operation. They are concentrations of intellect, to be controlled and managed by intellect alone: but this intellect is not to be expected in the mere operative, who is intended to be little else than a part of the machine, but it is to be looked for and required in the manager and superintendent; and the more the characters of superintendent and proprietor are united, the better. It is this want of knowledge and attention on the part of the superintendent, and not the character of the labor that exists at the South, that presents obstacles to the introduction of improved implements and machines in our farming operations.

POTATOES.

It is 272 years since potatoes were first known in Europe. They were introduced into Ireland, during the reign of Queen Elizabeth in 1565, by Capt. John Hawkins, who brought them from Sante Fe, in South America. It is said that they were first planted by Sir Walter Raleigh, who had an estate in Ireland; but the natural history of the potato was so little understood at that time, that Sir Walter resolved to renounce the expectation he had formed, of bringing this exotic to perfection in that country. When in due time, after he had planted the first potatoes, the stalks grew up, and he perceived upon the stem a green apple, he thought that was the fruit, which he had no idea of being concealed under the earth. He caused some of these apples to be boiled; but finding them nauseous to the taste, he concluded that he had lost his labor; and for some time thought no more of potatoes. However having some time after given directions that the ground should be dug up, or ploughed, to his very great surprise he found a plentiful crop of fruit, which proved most grateful to the taste. They soon got into general use, and became the principal food of the Irish peasantry.

AGRICULTURAL SOCIETY OF NEW YORK.

The State Agricultural Society of New York, desirous that some fixed principles should be established as the basis of excellence in the various descriptions of farm stock, (without reference to their *relative* merits as breeds,) have appointed the undersigned a committee, with instructions to call the particular attention of breeders throughout the States, to the importance of the subject, and to make the necessary arrangements for a Convention to be held at the Library Room of the American Institute, in the city of New York, during its 16th annual fair, in the month of October next,* the day to be hereafter noticed; at which breeders of stock and those interested in agriculture, are most respectfully urged to give their attendance, with a view to a full and free discussion of those forms, qualities and properties which most conduce to intrinsic value; and also that the distinctive characteristics of each separate breed may be as closely defined as possible.

* Evening of the 17th is fixed on for the meeting.

The Society believe that the decision of such a meeting will offer to the agriculturist the best information that can, at present, be elicited; and which, they trust, may be so satisfactory to the mind of every intelligent breeder, as to lead to greater uniformity of action and opinion, and *possibly* become a standard with them, by which to judge and be judged, in all cases of competition.

With these views of the subject, the committee hope you may deem it of sufficient importance to be present at the proposed Convention, and lend to its discussions the aid of your experience and talents.

The committee will be obliged by any suggestions, in the interim, you may consider of sufficient importance to be communicated to them in relation to this object.

FRANCIS ROTCH.
E. P. PRENTICE.
C. N. BEMENT.
GEORGE VAIL.
L. F. ALLEN.

Albany, July 28, 1843.

—

C. T. BOTTS, Esq.

Dear Sir,—You will perceive by the above circular that we are making an effort to erect a standard of form or criterion by which stock may be judged, or to settle on such points as the majority of breeders may deem necessary to constitute, as near as possible, a perfect animal.

The principal breeders that are known to the committee will be addressed, as above, but fearing they may not attach to it the importance which we think it deserves it is the request of the committee, that you particularly notice it in your excellent paper, and urge all breeders to attend, whether they receive one of the circulars or not, for it is intended to be general.

Respectfully yours,
C. N. BEMENT.

It is with pleasure we give currency to this circular. The object, to collect and compare the various floating opinions of the stock breeders of the United States, and from the aggregate information thus obtained to establish a standard by which the unlearned may be guided in choosing and rearing stock, is certainly a very desirable one. Although the generality of our readers are not what would emphatically be called stock men, still there are a few among them whose assistance would be highly prized by the committee.

There is no exhibition we have ever seen in this country any way comparable to the annual fair of the "American Institute" in New York. It forms the great emporium in which is annually collected the skill and ingenuity of the American mechanic, and a single visit to one of these interesting exhibitions, will do more to instil a correct knowledge of the progress of the arts in the United States, than would be effected by a twelvemonth's travel over the country.—Not only may the latest and best improvements in agricultural implements here be found, but the other arts will also be seen fully represented.

Some idea may be formed of the extent and variety of these exhibitions, when we state, that at the fair of 1842 there were exhibited upwards of 1,200 specimens of various kinds of workmanship, which, from their intrinsic merit and the beautiful array in which they were displayed, attracted a throng of visiters for weeks, the whole number amounting to upwards of 100,000 persons.

We have been requested to notify the public that the exhibition for the current year will be opened on the 10th day of October, and to the courtesy and kindness of the managers, of which we entertain the most lively and grateful recollection, we commend all our Southern friends, who can be present on the occasion.

JEFFERSON'S TEN RULES OF LIFE.

1. Never put off till to-morrow what can be done to-day.
2. Never trouble others to do what you can do yourself.
3. Never spend your money before you have it.
4. Never buy what you do not want because it is cheap.
5. Pride costs us more than hunger, thirst and cold.
6. We never repent eating too little.
7. Nothing is troublesome that we do willingly.
8. How much pain those evils cost us which never happened.
9. Take things always by their smooth handle.
10. When angry, always count ten before you speak.

For the Southern Planter.

FISH.

Mr. Editor,—After reading that part of the report of the committee appointed to examine the improvements upon Dr. Venable's farm, which speaks of his fish pond, page 172 of your last number, I cannot refrain from adding my testimony, to prove that fish may be raised nearly as easily as chickens. It is but little over two years since I attempted to raise fish;

and at an expense not exceeding ten dollars of my own labor, I have succeeded in stocking my pond with roaches, cats, sun perch, pike, and southern chub, to an extent sufficient to satisfy the expectations of the most sanguine temperament. The roaches have been very numerous indeed, and are now quite so; but they have been lessened of late in consequence of the pike and chub increasing very rapidly, who I have no doubt devour them by hundreds every day. The chub, however, I think is to become the master fish, as they are rapidly growing to a size which will well compare with the saltwater fish. They may be now caught in the pond from which I took mine, weighing five or six pounds, and I have no doubt I have some in my pond weighing three pounds; though I have caught none yet weighing over one and a quarter. As yet, however, I make no business of catching these fish, except to let them loose again, for fear of destroying the stock. In this amusement I think I have discovered what may not have been brought to the notice of every fisherman. It is the custom of most persons to throw crumbs of bread into the water when they are fishing, in order to draw the minnows, that they may attract the large fish. Instead of throwing in bread that will sink, they should throw in such as will swim. The crumb and crust of lightened wheat bread and the crust of corn bread will swim and show themselves to fish at a much greater distance than the bread that will immediately sink; consequently it will bring a great many more large fish to contend for your bait. In this way I think I have frequently brought half the fish in my small pond to one point. My pond, however, is quite small, not covering more than one-fourth of an acre. It is upon a marshy bog, not more than fifty yards from my dwelling house, and has tended, I think, to increase, rather than diminish, the health of my family, substituting pure spring water for the marsh mud.

In making a pond, all the heavy floods of rain water that are likely to come down from the valleys above the spring that is to feed it, should be turned off by side ditches; then the dam may be made with nothing but simple earth, without the least danger of breaking from the heaviest rains.

My fish pond is only one of my hobbies; I have another to trouble you with, if you please. I have long desired to bring into use in this part of the country,—the double horse left hand mouldboard plough, as used by our *transmontane* brethren; but I have tried in vain to do it, by constructing several ploughs of this description and offering them for sale at very low prices. The advantage of this plough over one with a right hand mouldboard, is principally this; it permits the lead or left hand horse to walk in the last furrow run, and thereby exactly measures each furrow slice, and enables the ploughman more easily to guide his team and more thoroughly to break up his ground, which are certainly great advantages. At a muster, on Saturday last, at our Courthouse, I set one of these ploughs to work in the presence of a large crowd, when every man present, save one, acknowledged its great superiority over the right hand plough in the particulars above mentioned. CHARLES S. JONES.

Near Louisa C. H., Aug. 14, 1843.

EMIGRATION TO VIRGINIA.

It is stated in the papers, that the Hon. A. L. Foster, M. C., from Madison, in this State, has purchased 1,000 acres of land in Virginia, at $3 50 per acre, and that Mr. Townsend, of Buffalo, now Sergeant-at-arms at Washington, has also purchased a farm in Virginia, and that both intend to settle there.—*Cultivator.*

Virginia "stock" is undoubtedly rising, and the *im*igration is rapidly overbalancing the *em*igration, of which we used to complain. Such is the effect of "the sober second thought of the people."

THE "ECONOMY OF FARMING."

We are indebted to the author for a copy of an agricultural work under this title. The text is a translation, by the Rev. E. G. Smith, of New York, from the German of Professor Burger, very copiously illustrated with notes from the most celebrated of the German and English writers upon the subject of agriculture. Although the terms *cultivation* and *husbandry* are frequently used as synonymous, they have, strictly speaking, very different meanings. The first has relation to the art of producing; the second, as its name implies, to the subject of taking care, as well of the product, as of the means by which the product is obtained. In this sense, it corresponds with our word *management.* By the "economy of farming," then, is meant the art of husbandry or management.—Much as we may be behind our European brethren in our systems of cultivation, it is in the other branch, and not the least important of the two, that we are most completely distanced.—The science of cultivation is, to a certain extent, involved, as yet, in the clouds of theory and hypothesis, but the subject of husbandry is a tangible practical question, upon which the experience of every sensible man must be of utility; we, therefore, consider the community

as under great obligations to Mr. Smith for the fund of valuable information he has afforded us in this work. By an attentive perusal of its pages, the reader becomes familiar with the estimates that have been made of the value of different kinds of food, the most economical modes of feeding, the relative value of the different kinds of labor of man and beast, the quantity of labor that may be expected from each, the production and preservation of manures, and the thousand questions that are involved in the management of the labor and products of a farm. The whole is furnished in a closely printed pamphlet of 130 pages for fifty cents, and we are sure that we have already marked for extracts what will be worth twenty times the sum to any farmer in Virginia. If the publisher thinks fit to ship us two or three dozen copies, we will dispose of them for him with pleasure.

METHOD OF CAUSING CABBAGES TO HEAD DURING THE WINTER.

In the fall of the year when it is time to gather cabbages, we always find more or less of them that have not formed any heads. They may have grown well, and have a large stock of leaves, but have not closed up in the form necessary to make a good, solid, compact cabbage.

William Vance, Esq. of Readfield, has practised for many years the following method, which effectually closes these loose leaves in the course of the winter, thereby furnishing him with a supply of the best kind early in the spring. In the fall of the year, just before the ground closes up he gathers all the cabbages which have not headed, together. He then digs a trench eighteen inches or more, deep, and of sufficient width to admit the cabbages. He then closes the leaves together by hand, winding a wisp of straw or something else around them to keep them together, and then puts them in this trench, with heads down and roots up. He then packs straw or leaves and earth snug about them, and rounds up the earth over them. The trench should be dug in a place where the water of the rains and snows runs off and will not stand about them. A board, or couple of boards, nailed together in the form of a roof and put over the mound, may be useful.

In the spring of the year open your trench and you will find that the cabbages are all headed firmly together, and if the water has not got in, will be solid and hard. Mr. Vance has had the goodness to send us a few heads which he has formed in this way, which were very nice. By following this plan, we not only preserve the cabbages well during the winter, but save much of the crop which is not considered worth much.—*Maine Farmer.*

For the Southern Planter.

CULTIVATION OF CORN.

Mr. Editor,—I did not design the communication, from which an extract is made and published in the July number of the Planter, for the public eye, or I would have been more careful and intelligible. "Investigator," an anonymous critic, seizing upon its imperfections as well as the errors of the printer, makes, though in a vein of sarcastic raillery, some pertinent inquiries, to which I most cheerfully respond.

In order that the system of cultivation, which my communication recommended, may be the better understood, I propose to explain the manner in which I have managed my present crop. That I labored judiciously will be *known* from the result, and may be *conjectured* by a comparison of it with that of any other on this section of the Roanoke; and it would afford me very great pleasure to have Investigator himself institute the comparison.

A freshet prevented my planting as early as usual, or desirable. As soon, however, as the land was in order to do so with safety, it was commenced and completed. It was laid off 5 by 2, with a single stalk to the hill, and so thinned (as a substitute for re-planting) that each acre contained its requisite number, of the same age and size. After the corn was well up, and before it could be much benefitted by work, I ploughed every other row, *alternately*, through the crop, with a trowel hoe, an instrument well calculated to soften the land and prepare it for future operations. Having gone over in this way, I then used the turn plough in the other row, *throughout, alternately*, barring the corn and running only twice in a row. The corn was ancle high, the grass springing up very fast and thick, and the season favoring it. The result of this operation fully met my expectation, and the young grass was most effectually destroyed. The corn was not only benefitted by the removal of a dangerous enemy, but by converting it to useful purposes. Grass when covered in this way soon undergoes fermentation and the regular process of decomposition, and becomes no insignificant auxiliary in pushing forward the crop.

It will be recollected that now the crop is ploughed entirely over, one row with the trowel hoe and the other with the turn plough, alternately, throughout. The corn was leg high and sufficiently vigorous to bear a moderate *dirting* (not "*destroying*"). The trowel hoe was run as *near as possible to it*, in the row previously ploughed with the same instrument, and with

the turn plough following immediately, a little dirt was thrown to the corn. The trowel hoe answered a double purpose. The land immediately under the corn was well broken, and the turn plough was kept off at a respectable distance. The weeders followed immediately after this operation, standing in the oldest ploughed row, cutting up the grass in the *balk* and pulling all not killed by the plough, from the fresh ploughed row into the one in which they stood. Grass dies much sooner on old than fresh ploughed land, and is not half so apt to take root again. Those who cultivate turfy lands, particularly those well set in herdsgrass, would soon perceive the advantage of this method of managing it. Indeed, I cannot conceive how it can be otherwise destroyed without constantly hoeing it, and shaking the dirt from the sod.

After getting over the crop, working every other row, alternately, in this way, the corn where I first begun had grown rapidly, but not too rapidly to plough the other row in the same manner. Every thing inviting it, the operation was performed and the whole crop then lay in the same situation. Even at this advanced stage of the crop no injury has ensued from the *close use* of the trowel hoe. The result, no doubt, would have been very different and the consequences most fatal, if *every row at the same time* had been subjected to the operation. If the corn had been a little older and larger, and the season different, I would not have hazarded its use even according to my system. Nor would I have worked the other row as I did, if the corn had been smaller and the grass on the increase. In the first instance, I would have used the turn plough *alone*, dirting the corn—in the second, I would have lapped the grass in the centre of the row, and then sided with the trowel hoe. To destroy the grass and render the greatest service to the crop is the object of every working, and of course, a good farmer endeavors to effect this by changing his tools and varying their use.

The corn was now generally as high as a man's head, and each row in the same situation. I then dirted the corn with the turn plough, running four times in every other row, *alternately*, through the crop, and after getting over, returned and worked the other row in the same manner. The hoe hands followed this last ploughing, standing in the oldest ploughed row, cutting the grass in the *latter*, and hilling effectually the corn. This would have completed my labors had not a very heavy rain have fallen just after finishing the first row with the turn plough, which rendered another working in that row indispensable. I used the three teeth harrow with evident advantage, running three times in each row.

From what has been said, it will be perceived that the rows *may be* worked differently, though it does not follow that they necessarily *should*. This was the idea I intended to convey in my former communication, though I must confess, the language justifies the other construction.—In regard to the saving of labor by this system, I repeat the assertion first made. My experience teaches me (though I have not subjected it to an *accurate* experiment) that at least a third more can be cultivated. The hoe work is infinitely less and lighter, and the grass more under the control of the plough. Though Investigator may be startled at the communication, corn does not appear to be injured by one row being a *little in the grass* if the other be clean and in order. It is *more* than equivalent to having the *half* of your crop clean, though, mathematically speaking, *there is no difference.*

If Investigator has low grounds, it matters not of what description or quality, and will follow this system of cultivating a part, I will pay him whatever he loses by it, if in return, he will pay me for the labor saved.

This manner of cultivation is adapted to every description of crop, and has been followed by me for several years with tobacco, with marked success. It is not, however, an invention of my own, and I feel none of that sort of attachment which generally attends the paternity of an invention. I borrowed it from Mr. C. Capehart, a practical and eminently successful farmer on the Albemarle Sound, and if success be an evidence of its value, Mr. Capehart's example will place it above every other plan.

I have never known a crop checked in its growth or otherwise injured when worked in this way; and *firing*, which so generally attends the use of the turn plough, is never witnessed.

I have confined myself to the manner of cultivating my low grounds, which were laid off but one way. But high land may be cultivated upon the same principle, even when laid off both ways, and with evident advantage. The turn plough is of course dispensed with, and as we are confined mostly to a particular description of plough, the manner of cultivation cannot be so often varied. The benefit resulting from your land's not washing so much, in my opinion, should of itself recommend this system to every provident farmer. I cultivate as hilly a farm as any on this side of the Blue Ridge, and speak advisedly of its value. By the assistance of the artificial grasses, my own has been regularly improving, while some other estates on the river have been gradually gullying and washing away.

The corn of which I so highly approve, is not the Dutton, as my friend Mr. Hicks, of Lawrenceville, informs me, but a beautiful white, of early maturity, moderate size, and of great fecundity. I obtained it in Maryland, and it may be what is sometimes called the Baden. It

yields from ten to twenty per cent. more than the gourd-seed, though in weight, measure for measure, it is something lighter. It does not rot half so soon as that description of corn, nor does it shatter as much.

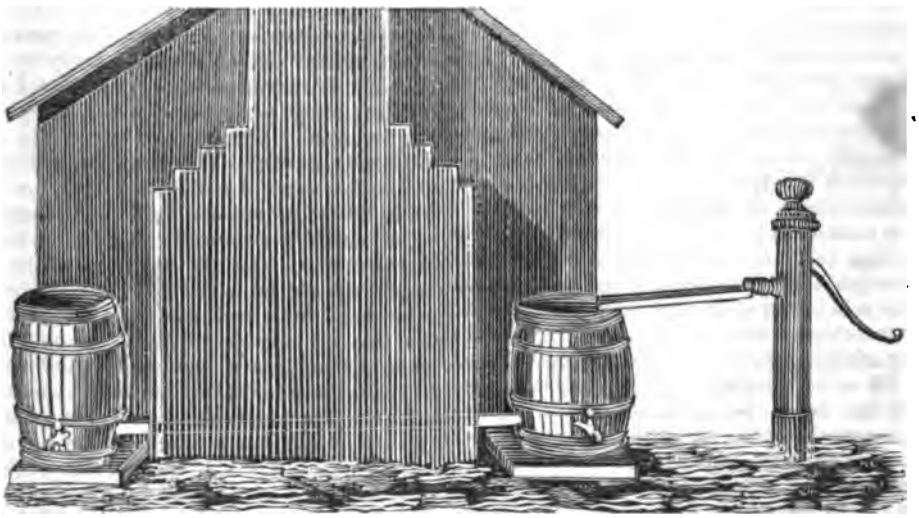
THOMAS G. TUCKER.

Northampton, North Carolina.

We are sure Mr. Tucker's ploughing is much better than his hand writing, the difficulty of decyphering which must plead as the printer's apology for the errata in his first communication, as well as for those which we fear are too likely, from the same cause, to creep into this. We are always pleased to hear from our old schoolmate, on more accounts than one, but we do wish he would not make all his letters so *exactly* alike, if it were only for the sake of variety.

For the Southern Planter.

COOKING APPARATUS.



Mr. Editor,—As cooking food for stock is generally practised in your vicinity, and as the saving of fuel is an object of some moment, permit me to give you a sketch and description of an invention of Dr. William A. Armistead, near Plymouth, in this State, which is admirably adapted to this purpose. It consists simply of a cast iron tube, four inches in the bore, and of sufficient length to pass entirely through the kitchen chimney and project eighteen inches on each side; it is placed in the fire-place just where the back log usually lies, and each end, after passing through the chimney, is inserted in a barrel on the outside. Cocks are put into the barrels of sufficient size to draw off speedily whatever is cooked. The pipe being open, the two barrels of course communicate with each other, and the water from one flows into the other. The ordinary kitchen fire heats the water in the tube, and you would be astonished to see how soon it begins to boil in the barrels. Dr. Armistead's chimney is an outside one, and so situated, that water can be pumped into the barrels by the use of a small trough, as represented in the drawing.

T. G. TUCKER.

North Carolina, August, 1843.

WOOLLEN FACTORY.

We take great pleasure in calling the attention of our farmers to the woollen factory lately established by Messrs. Jones & Mackenzie in our city. Mr. Jones, we understand, comes to us chock-full of enterprise and experience in his business, which will undoubtedly secure him success. This establishment promises to effect too great objects for our agriculturists. In the first place, the market for wool will be greatly bettered, and in the second, we shall have a fac-

tory in our midst, where our exact wants will be known and supplied. The proprietors are now engaged in the manufactory of a peculiar cloth expressly for the purpose of supplying the Southern farmer with negro clothing. Gentlemen from the country will find much to interest and profit them in a visit to this establishment.

For the Southern Planter.

COMMENTS ON THE AUGUST NUMBER OF THE SOUTHERN PLANTER.

Rust Prevented by the Use of Ashes.—It is admitted on all hands that silica is as necessary for the support of a plant, as bone is for the support of an animal; and that for this purpose the silica must be in a soluble state, or in other words, it must have become "pure earth of common flint." And it is also admitted that an overdose of ammonia will cause grain sowed in the usual way, to rust, lodge, and fall. "But that rust proceeds from the want of the indurating quality in the straw, afforded by the (proportionate quantity of) silica," cannot hold good universally; for throughout my observation, that land which is best adapted to the growth of the bamboo (which contains a large portion of silica) is most liable to rust grain. Moreover, grain standing very thin, seldom fails to rust; and where grain has been spilled, and thus planted at the rate of ten or twenty bushels to the acre, it but seldom rusts. The silica in wood, properly speaking, has already been dissolved, and the lye in the tub only extracts it perhaps; but I do not know that it dissolves or extracts or decomposes the silica in wood, much less do I know that by this means oak staves will be shrunken to one half their width. A strong alkali may decompose quartz and flint, but an usual dressing of ashes cannot. Ashes out of which all the soluble alkaline matter has been extracted, contain a large portion of silicate of potash, which silicate when applied, is understood to go directly to the nourishment of plants. On Long Island and other places where ashes are used most profusely as manure, they seem to be valued none the less because they may have been leached.

Report of the Mecklenburg Club.—As Mr. Botts has in substance given my views under this head, I shall only add one more remark. The committee say that "Dr. Venable's corn field was well prepared and planted, and although recently covered with a strong herdsgrass turf, gave promise of an abundant crop," &c. Now I understand by the insertion of *although*, that objection is made to planting corn on a grass turf. If the gentlemen intended to assert that the Doctor's corn field was covered with a strong herdsgrass turf recently growing amongst the corn, then I say O fie! for the Doctor; but if they intended what I understand, then I say O fie! for the committee.

Hessian Fly.—Did Mr. McKenney never see a bug with its bill poked into a chesnut or a chinquepin? Did he never see thousands of eggs deposited on the hulls of peas? If he has not, I would not give a cent for his theory and observations on Hessian fly or any other insect. Whether the bug with his proboscis in the chesnut was merely feeding, or intending to deposite eggs, I will not undertake to say; but from the egg on the pea-hull I have often traced the maggot to its lodgment in the pea, and noticed it in all its stages up to a full grown bug. As well may one tell me, that the action of the clouds can create an eagle, as that the action of a vegetable can create an insect. And as to "the perfection of the grain depending upon the proportion of insects therewith connected, which proportion is modified by weather, climate, soil," &c.—away with it. I suppose the gentleman would say my old sow must be lousy, to be in health. These remarks are rough, but I feel it my duty to speak boldly, not only on this subject, but also on that of

Gearing Horses.—This drawing and theory are both wrong. In the first place, I will remark, that in the use of a right hand plough, the right hand horse must be kept in the furrow, therefore, that end of the tree to which he is attached will not go to the right, at *e*, though the horse be thrown back thus far; but must keep the line of direction. Again, although the horse at *a* be thrown back to *e*, yet this will not place the horse at *b* more than halfway to the position *d*. Let us consider the horse at *a* stationary, and let the horse at *b* draw the end of the tree forward to *d*, it will be seen that whilst the horse is going to the right the plough is going to the left; consequently the width of the furrow is increased, and consequently the draft is increased. It is asserted that the fulcrum or centre of motion is at *c*; this I deny, and assert it to be in front of the tree, and equidistant between the horses, and there it will remain always. But suppose the fulcrum to be at *c*, and this point always in the line of direction; yet, as the points *a*, *b*, *c*, are made fast with regard to each other, and their distances equal, I cannot for my life see how placing one end of the tree back or forward can create inequality. When the tree is perpendicular to the line of direction all will admit the draft is equal—when the tree is parallel to the line of direction the draft is equal—and if all do not admit the draft to be equal at any angle, I undertake further proof.*

* "Investigator," we respectfully suggest, has misunderstood this article. What he means by the drawing being wrong we do not exactly comprehend. He seems to take it for granted that the principle is only applicable to ploughing, and that the furrow horse

To Mr. Woodfin.—You inquire why I prefer composting dead animals with marl, rather than plaster? Indeed, sir, I had not thought of composting flesh with plaster; consequently I could not have preferred marl. I would, however, remark that the dead animals of Richmond during the year, would saturate many hundred tons of plaster, and what would Mr. W. do with this quantity. The marl without other ingredient, is a good manure; and when composted with animals, it would not only decompose the flesh and absorb the ammonia, but would also dissolve the bones, hoofs, horns, and teeth; and when matured the whole could be carted and spread broadcast with shovels. I would like to know of Mr. W. how many, and what kind of dead animals he composts with plaster? How much plaster, and how applied to a horse or cow? And whether the compost is applied to the earth by hand or not?

To Mr. Botts.—Although I never saw you, yet in my last I took the liberty of casting a few round stones at you, and just as I expected, their direction and purpose were timely discovered; and instead of their doing mischief, they were caught in your hands, and used for building' purposes. All that I have to add is that you have left no stones on hand except such as are large; and as I am no Ajax you are now safe. As to the covering of plants or other vegetable matter, I hope that as this is the first time of calling, the cause may lie over at least one term.

INVESTIGATOR.

For the Southern Planter.

BOMMER'S MANURE.

Mr. Editor,—Why did not Mr. Woodfin give us the result of his last experiment with Bommer's manure? An unfavorable impression is made on the public mind by the fact, and in your next some explanation ought to be given. How is poudrette likely to answer our purposes? and how is the celebrated controversy between the Dicken's and Berkshire hogs progressing? Have Gen. Richardson and Col. Burfoot become tired of the matter? These little things give animation and spirit to the thing in the country, and as your object is *good* they should not be overlooked.

Yours truly, T. G. T.

Mr. Woodfin has a great indisposition to make himself, as he expresses it, so conspicuous in the public prints. But we are authorised to say that he was even better pleased with his last experiment, than with his first, and that every day's experience has only the more fully satisfied him of the incalculable value of this process.

As to the *poudrette*, we are unable to speak. We have received very little information concerning its action, and that little of a very contradictory character. We shall be obliged to any one with whom it has either failed or succeeded, for a report.

Hogs are not now the order of the day, and the controversy alluded to by our correspondent, has gone, as old Johnny Q. would say, "to the receptacle of things lost on earth."

For the Southern Planter.

MEDITERRANEAN OR FLY-PROOF WHEAT

Mr. Editor,—The best wheat for seed, being one of the proper subjects for discussion in your journal, I beg leave to call the attention of its numerous readers to that kind known as the Mediterranean or fly-proof. Samples of this variety came frequently under my notice last year, and in this and in every instance, presented an unfavorable appearance; being dark and dull in complexion, and long and irregular in shape; in short, the reverse in every respect of the sound, plump, and bright variety known as the Red May. I regard the Mediterranean as being in every particular a coarse wheat, and totally unfit for the manufacture of flour of a superior grade. In saying this, I acknowledge that I speak of it from appearance only, never having had it tested by grinding; but to this test I shall submit it, if opportunity permits, and report to you in time for your next number. The impression I now have in regard to this wheat, led me to believe that no experienced buyer in this market, would purchase it, except at a reduction of ten to twenty cents per bushel from the current value of other kinds.

Mr. JOHN ENGLAND, Flour Inspector of this city, and a practical miller of high reputation, has examined samples, and condemns it as unfit for Richmond flour. This Mediterranean wheat has recently been highly recommended in this neighborhood for its astonishing productiveness, and I have no doubt it has merited *in particular instances* all that has been said of it; but if the inference be drawn from particular instances that such is its general character, I am sure far-

can never be pulled out of the furrow; if this were so, the tree would never come into the position supposed. If Investigator will use a common single tree, all of which are attached as here directed, and pull at (*a*) against a greater power at (*b*) he will find when he is dragged to (*c*) that his power will increase, and he will, if not too much overmastered, begin to regain his ground, or at least maintain his position; and this simply because his opponent's lever has been shortened by his new position; and this, as is demonstrated by the drawing and explanation, in consequence of the points of draft, (*a*) and (*b*), not being in the same straight line with the point of attachment, (*c*).

mers will find themselves mistaken. I can assert upon the authority of Dr. GAINES, of Powhite, Hanover, that last year he sowed two kinds of wheat, the Red May, and Mediterranean, and from his experiment, he decides in favor of the superior quality and greater productiveness of the former, and the latter he will not sow again. He offers it for seed, not upon his own, but upon the recommendation of others. On this subject I expect to collect further information, which shall be communicated through your pages in good time.

Very respectfully, &c.

R. B. HAXALL.

This fly-proof wheat is an old acquaintance; two years ago, we obtained and sold in this market a large quantity of the seed at a very extravagant price, and we are now authorised to sell a crop at a much lower rate. But independent of Mr. Haxall's opinion, which would be potential with us and with all who know him, we had begun to consider it pretty much an exploded humbug. At any rate, those who purchased it in 1841 seemed to esteem it very little in 1842. It has obtained a good deal of notoriety this year from a crop made by Mr. John Poe, in this vicinity. Mr. Poe informed us, that, sowed side by side with the common varieties, it proved itself to be extremely hardy and vigorous throughout its growth, being free from fly and rust, and nearly twice as productive as any other kind he had ever cultivated. This, however, is by far the most favorable account we have had of it.

When Mr. Haxall handed us the above, considering that his interest was identical with that of the farmer, and that his great experience in the milling business must have made him familiar with the different varieties, we asked him what kind of wheat he would recommend to the farmers of Virginia. He gave the preference decidedly to the *Red May*. This is, as its name imports, an early variety, and is a great favorite with Mr. *John Watkins*, of Ampthill, whose name it sometimes bears. It comes to maturity two weeks earlier than other kinds, and thereby, of late years, has generally, in a measure, escaped both fly and rust. It is a tender wheat, and somewhat liable to be winter killed; it should, therefore, be sowed always on strong land, and seeded thick, probably not less than two bushels to the acre. Mr. Haxall states, that it is the heaviest, and thereby the most productive, wheat that has ever passed through his mill; it is not unusual to find it weighing from sixty-six to sixty-eight, and he is yet to see the first bushel that weighs less than sixty. The quality of the grain is very superior. We have no doubt, seed of this valuable variety can be obtained from Mr. Watkins, probably at the mill price.—The Mediterranean, or fly-proof, we are authorised to sell at $1 25 a bushel.

SIGNS OF THE TIMES.

More will be done for the cause of agriculture in the next twenty years than has been accomplished in the thousands that have preceded them. There are many evidences of the fact, that the public mind is awakening, not only to the importance of this fundamental art, but to the field of discovery it opens to the speculator and the philosopher. At this time of day, the press is the best index to the current of the public mind, and this is teeming with work upon work on the practice and science of agriculture. That art, which was formerly considered almost beneath the dignity of a "book," is now in danger of being overwhelmed beneath the pile of learning that the press is showering on it.—We have just received from the publisher, Mr. D. K. MINOR, a neat volume of 280 pages, containing a re-publication of five lectures delivered by Mr. J. F. W. JOHNSTON, "On the Improvement of the Soil by Mechanical and Chemical Means." This is a part of a series on "The Applications of Chemistry and Geology to Agriculture," which has won for its author a most enviable reputation amongst the farmers of England. We have not had time to examine the contents of this volume, but we see that it meets with the unqualified approbation of the press both in this country and in Europe: the 16th lecture, particularly, on "The Use of Lime as a Manure," has been pronounced to be the best treatise on the subject extant. The publisher has proposed to send us a few copies for sale, which at the extremely low price at which they are offered, 31¼ cents a copy, cannot fail to find a ready market.

We have at our office a number of the *Pictorial Times*, London, containing an illustrated description of the meeting and dinner of the Royal Agricultural Society at Derby: it is well calculated to impart an idea of the magnificent scale upon which these things are conducted in Great Britain, and we think the ideas of some

of our friends may be considerably enlarged by an examination of its pages. We are much indebted to the Editor of the "Agriculturist" for the courtesy which prompted the transmission of this number, and shall rejoice in any opportunity to reciprocate his kindness.

SOWING WHEAT.

An impression prevails that our wheat is generally too thinly seeded, and that much larger crops would be the result of a freer use of grain. Captain Barclay, the intelligent Scotchman who made an agricultural tour of the United States in 1841, earnestly urged upon Mr. Marx, whose farm he visited in this vicinity, to increase his allowance to four bushels an acre, the quantity usually given by British farmers. He thought the liability to winter killing in this country, made even a greater allowance desirable.

We find an editorial on this subject in the last number of the "American Farmer," which, with all our respect for the wisdom and experience of its conductor, we must be permitted to consider, in part, visionary and impracticable.—We allude especially to the advice, or suggestion, as the Editor modestly terms it, that, there is no necessity for delaying the sowing of wheat to avoid the fall attack of the fly, for, says he, if the progress of the insect be carefully watched, it may be taken in its *pupa*, or worm state, and mashed by passing a heavy roller over the field. We would suggest to our friend that his finger and thumb would constitute a much more efficient implement for the purpose, and that it requires a much "nicer fit" than a roller makes with the inequalities of ploughed ground, to mash a worm.

After sobering down again to his usual style of practical wisdom, the Editor concludes with the following remarks, the excellence of which more than excuses this unwonted flight of imagination:

"We would suggest that in every instance where wheat may be sown, that the ground undergo thorough preparation, and that all should consider deep ploughing and repeated harrowings essential operations.

"We would advise, that if the land may not have been previously limed, that from five to ten bushels of lime per acre be sown thereon, or an equal quantity of ashes. These quantities are small, but will be found sufficient for the uses of a season. And wherever wheat may be sown on a clover-lay, we would sow from two to four bushels of salt to the acre.

"We would, by all means, be particular in the selection of *good seed*, having due regard to weight of grain, strength of straw, earliness of maturity, and quality of flour.

"We would not have any wheat sown, without having it first thoroughly washed in pure water, and then soaked in a brine of salt that would bear an egg or potato, for twenty-four hours, which when taken out should be drained, and then dried in lime. We are the more particular in insisting upon this mode of preparing seed wheat, because we have noticed many accounts of injury to the crops during the late season from SMUT, a disease perfectly within the control of the wheat grower, and which can never occur but from culpable neglect, as the means we have pointed out, we do know, will prevent its occurrence.

"While we are upon the subject, let us advise all wheat growers to give to his land a bountiful allowance of seed, as should he fail to do this, the bare portions of his soil will call into being some of those numerous weeds, the seeds of which are always at hand, to occupy spots left by the neglect of the husbandman.—He that wants a *clean field of wheat must fill that field with wheat plants. If he does not commit a sufficient quantity of seed to the earth, nature will not supply them, but she will supply a crop of pestilent weeds to rob his wheat plants of their food, diminish his crop, and thus punish him for neglect of duty.*"

RIVER MUD.

We make the following extract from a letter received from Mr. *B. H. Magruder*, of Albemarle:

"While I am writing, I will state the result of an experiment I made in hauling river bank mud or deposite on sandy land. My farm is on the Rivanna River, and last October I hauled out 150 horse-cart loads on an acre and a quarter of very sandy land, which had never previously borne a crop worth gathering. It was spread in the winter and ploughed in with a three-horse plough, and planted in corn last spring. The result is, that the corn on this portion is now better than that on the land contiguous to it, which has always produced a good crop. So that I fully agree with your correspondent, Richard G. Morris, in his estimate of the immense value of river bank deposite."

MAKING FRUIT TREES.

When you wish to procure young trees of a particular kind of fruit for transplanting, dig around the old tree until you come to a healthy, growing root, which cut off, and turn the end

of the detached portion out of the ground. It will produce shoots the first season, and in a few years bear fruit of the same kind as the parent tree.

For the Southern Planter.

AGRICULTURAL APHORISMS.

NO. V.

Partly Copied.

Annihilate the implements of husbandry which have been brought into existence in the course of a few hundred years, and the recollection of their uses, and starvation would be the consequence. So in a few hundred years from this time, the then inhabitants of the earth would starve on the practice of our present system of husbandry.

We are all born in sight of the mountain of plenty, and all desirous of climbing to its summit; but let me tell you, that you can only do this by holding on to a plough or hoe handle. If you attempt to climb up by any other means, you will surely tumble. He who never attempts to climb up this mountain is a brute, he who attains half way, is a man, and he who mounts the summit, is a hero.

With him who has "learned enough," I claim no kin; nor will I keep his company.

Nature works for the agriculturist whilst he is sleeping; who else can claim the *benefit?*

Equally silly is he who is killing his land, to fill his purse, with him who killed his goose to get the golden egg.

We learn not so much by our own experience as by the experience of others; and it is much easier to procure this by reading than by travelling.

He who seeks more light the more he finds, and finds more the more he seeks, is worthy to be called a sage.

You never saw a vulgar character *disinterestedly* sensible of the value of time.

Neatness begets order.

He who assumes the air of patronage, should know, that unattended by delicacy, his services are affronts.

Prejudice and conceit, are the offsprings of ignorance, and the great barriers to agricultural improvement.

A cent expended in money or time, in the promulgation of agricultural knowledge, will add many dollars to the public stock.

Those who exert themselves in the diffusion of agricultural knowledge, receive the approbation of all the real friends of their country.

Nothing injures agriculture more than whimsical novelties; except bigoted adherence to old and bad habits.

If you treat your land badly, it will return the compliment.

Never plant on foul ground, to save a ploughing, or on wet ground to save time.

The best way to convert an agricultural bigot, is to put good examples before him, and be silent.

If we make large crops at the expense of our land it becomes every year more evident that our apparent gain is real loss.

Manure is to a farm, what daily food is to an animal; it must be procured at any sacrifice.

It is necessary often to be reminded of what we already know.

ARGUS.

Amherst, August, 1843.

CHOOSING BEES.

Place your ear close to the hive, and give it a tap: if the inmates give a short and sudden buzz, all is right; but if it be a languid hum, or rather a purring sound, the hive must be rejected, for the bees are weak.—*Wrighton.*

CONTENTS OF NO. IX.

Farmers' Clubs—Establishment of the Henrico Farmers' Club, p. 193.
Indian Corn—Different methods of cultivating, p. 193.
Clover Hay—Various modes of curing, p. 194.
Soap Suds—Their effect on cabbages, p. 195.
Cotton and Flax—Information as to the cultivation asked for, p. 195.
Fowls—To keep them out of yards and gardens, p. 195.
Sweet Potatoes—Recommended as food for hogs, p. 195.
Guano—Some account of it, p. 196.
Flowers—Some suggestions relative to the cultivation of, p. 196.
Gate—Another described, with a cut, p. 197.
Coal Ashes—Experiments with, p. 198.
Lime—Its action upon sorrel, p. 198. How it should be used, p. 198.
Gapes in Chickens—To cure, p. 198.
Wood—To prevent decay, p. 199.
Raspberry—Remarks on the cultivation of, p. 199.
Mecklenburg Club—Report from, p. 199.
Association—Value of, p. 201.
Emigration—Deprecated, p. 201.
Run-Round—To cure, p. 202.
Weather—To foretell, p. 202.
Marl—Apparatus for testing described, with a cut, p. 203.
Machinery—Can it be adapted to the art of agriculture? p. 205.
The Potato—The history of, p. 206.
Cattle—Proposition to establish standard of form, p. 206.
Fish Ponds—Communication concerning, p. 208.
Economy of Farming—A new work noticed, p. 208.
Cabbages—To make them head during winter, p. 209.
Corn—Mr. Tucker's mode of cultivating, p. 209.
Cooking—Apparatus for cooking food for stock described, p. 211.
Woollen Factory—Established in Richmond, p. 211.
Comments—On August number, p. 212.
Bommer's Manure—Inquiries, p. 213.
Wheat—Mediterranean, p. 213.
Johnson's Lectures—Noticed, p. 214.
Wheat—Observations on sowing, p. 215.
River Mud—Its value as manure, p. 215.
Aphorisms—No. 5, p. 216.
Bees—How to choose a hive, p. 216.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS, Editor.

VOL. III. RICHMOND, OCTOBER, 1843. No. 10.

For the Southern Planter.

IMPROVING OLD LANDS.

Mr. Editor,—At the request of a friend, I wrote to Dr. R. D. Palmer desiring him to communicate any knowledge which he had derived from experience as to the best mode of improving our old lands. I send you for publication what he says on the subject, as he gave me permission to do so if I thought any one might be benefited by it. It is evident that we shall have to resort to his or some other mode for restoring our worn-out lands. From my own experience and observation I feel no hesitation in saying that I believe the Doctor's plan to be the most practicable and economical I have seen suggested.

J. MORTON.

Spring Grove, Campbell, Aug. 11, 1843.

—

"In 1827, I settled on a farm of 560 acres, in the lower end of Campbell county, in the most exhausted condition of any, perhaps, in the State of Virginia. It had been under the very worst system of management from the time of its settlement in 1755. The soil being red, its aspect generally was more that of a gully-side than any thing else. Hundreds of gullies were everywhere to be seen, some from forty to fifty feet wide, and as deep as a common house-top. The previous occupant had annually expended from one to two hundred dollars for corn. An intelligent lady remarked to me that 'the land was so thin that we would have to double it.'

"From this appalling picture the question will naturally arise, 'why did you purchase?' The answer is that 'I thought it a suitable stand for the practice of medicine, and that from some eighty or ninety acres of creek bottoms I should be able to draw a support until the exhausted land could be reclaimed.'

"At first I divided the farm into four equal shifts, and cultivated in corn, followed by wheat, where the land was thought to be good enough to produce it, and where not, in oats or rye. In consequence of the great poverty of the soil, rye was generally preferred, as oats would not grow high enough to be cut. My aim, from the first, was to clover and plaster all of the land in small grain; but, from the paucity of my means, much could not be done in that way for several years. Experience soon taught me that one-fourth of my land would not produce enough to support my family of ten or twelve in number. And that the better way would be to resort to a ring-fence: and cultivate the flat land and such places as required cleaning up, while I was manuring the thinner parts of the farm. My aim has ever been to raise as much manure as I possibly could, without neglecting other necessary things; and always to haul out in the spring. The principal resources have been from corn-stalks, leaves, straw, &c. When put in the stables and farm-pens they afford comfortable beds to the horses, cattle, &c., while, at the same time, they absorb and retain the liquid manure, which otherwise would be lost.

"The present condition of my farm will tell whether my efforts have been in vain.

"I should not neglect to say, that as soon as all of my galled land got in a condition to bring grass, I again divided my farm into five, instead of four shifts; and that now we fallow one, so as to have, annually, one in corn and two in small grain.

"I made no tobacco until my fields every where, through the assistance of manure, clover, plaster, &c., had taken on a rich mantle of green.

"The first object of the farmer, in reclaiming worn-out lands, should be to extend his manures so as to get as much stuck in grass as he can. For this purpose I think top-dressing answers the purpose best. A mixture of red clover, herdsgrass, timothy, greensward seed, &c., with plaster of Paris, sown late in February or early in March, so as to put a bushel of plaster to the acre, will generally stick well, especially if the thinner places have a little top-dressing. But little grazing should be done except on the field intended for corn the ensuing year; and that, principally, after the full blossoming of the clover.

"As time and leisure may be afforded me, from the pressure of my engagements, I may address you on some of the individual branches hinted at in the foregoing desultory epistle.

Very respectfully, R. D. PALMER."

LIME, SALT AND ASHES.

We lately saw an instance of the wonderful effects of the above substance as a manure, on

the place of Mr. G. W. Shaw, in Needham. The soil was a light, sandy loam, that had become so exhausted that it produced little else than sorrel, as was there shown by adjacent lands. So small was the produce, that the person who sold the land and had a claim to its use one year more, was willing to relinquish his claim to four acres for three dollars.

Last spring the land was ploughed and harrowed, then half an acre for corn was manured with two bushels of salt, two casks lime, and the ashes from one ton of coal, mixed with six or seven cords of loam, taken from a ridge, where a wall had been removed. On one side the wall, the headlands had been thrown, and on the other, some little loam from the side of the road.

The salt and lime were refuse; the former cost twenty cents per bushel, and the latter seventy-five cents per cask. The ashes and loam were reckoned but of little value. This manure was spread on the land, and remained on the top, the corn was dropped on it, without furrowing or hoeing.

We saw this corn July 20th, and it was one of the most luxuriant and handsome pieces that we have seen, and more forward than any other. It was all spindled out, and beginning to silk. It was throwing out two, three, and in many cases four or five shoots for ears. A good deal of it was five and six feet high; and though in the time of a severe drought, it did not suffer from this cause, as there was moisture between the rows at the surface. We noticed the same appearance as to moisture in the garden manured in like manner. As an experiment, a rod or two of this land was manured with a shovelful of stable manure in the hill (not a good way of applying it) and on that the corn was not much more than half so high and not so forward, as it was just spindling, while the other was beginning to silk.

This experiment, with mineral manures so successful and so promising, thus far, is worthy of attention. We hope to be able to give the result by and by, and show a specimen of the crop. The corn is about twice as thick as usual, besides pumpkins and turnips on the same land. The rows are less than three feet apart and the hills less than two. As the corn is forward, if it be cut up at the ground and shocked, when the grain is well glazed the crop will doubtless be better than it will if the stalks be cut a little before this time, and it will let in the sun so as to give a good growth to the turnips.—*Boston Cultivator.*

These ingredients, lime, salt, and ashes, are the principal agents employed in "Bommer's process," which we verily believe is to effect wonders for the agriculture of the country.

For the Southern Planter.

MECKLENBURG AGRICULTURAL HOLE AND CORNER CLUB.

Mr. Editor,—At a meeting of the Upper Corner Agricultural Club of Mecklenburg convened on Saturday, the 26th instant, at the house of the subscriber, for the purpose of eating peaches and melons, and looking at the tobacco crop, after hearing the editorial comment on the report on the farm of Dr. Paul C. Venable in the last number of the Southern Planter, the Club unanimously adopted the following resolution, and offer it for publication.

Very respectfully,

A. C. Morton.

—

C. T. Botts, Esq.

Sir,—By order of the Club we are required to give you the information contained in the resolution which follows, and we take pleasure in discharging the duty imposed upon us:

"*Resolved*, That Dr. Howel L. Jeffries, Dr. Paul C. Venable and Anderson C. Morton, be a committee to inform Mr. Botts, of the Southern Planter, that the Club feel flattered by the interest expressed by him in their proceedings, and would be happy not only to have his continued co-operation in the great cause of agricultural improvement, but to see him and give him the right hand of fellowship at any of our Club dinners—and also to inform him that it is the uniform practice of the members of our Club to carry corn to mill in both ends of the bag, and that however much we venerate our ancestors, we utterly eschew and repudiate, not our debts, but the old system of galling and excoriating our lands—and that if he will come to see us, we will show him some clover fields, meadows, muttons, veals, peaches and melons that will make his mouth *water* for a month."

The Committee beg leave to add for themselves their best wishes for you and the success of your valuable periodical.

Very respectfully,

Paul C. Venable.
Howel L. Jeffries.
Anderson C. Morton.

Bluestone, August 29, 1843.

We are much obliged to the Club for the liberal and handsome manner in which they have been pleased to pardon the almost unwarrantable liberty we took with the report of their committee. If ever circumstances should permit us to visit the county of Mecklenburg, the greatest pleasure we should anticipate would be the making the personal acquaintance of the members of the Mecklenburg Hole and Corner Club.

For the Southern Planter.

YIELD OF INDIAN CORN.

Mr. Editor,—I see that the Cultivator has rather vauntingly put forth a list of some forty individuals, who have raised upwards of an hundred bushels of corn to the acre. I also observe that these wonders were all achieved north of the Potomac. Now, I am not exactly like the Kentuckian who bragged that the water in his native State was wetter than it could be found elsewhere, but I am too good a patriot to permit a brag to go round without saying something for my own country. This, then, I will say for the people of Virginia and North Carolina, that I believe they can beat any people upon the face of the earth in cultivating poor land. God knows, if experience is of any value, they ought to be perfect. And in fact, I believe there are many of them that can, and do, get an average of five bushels to the acre where Liebig himself could'nt get one. I have met with some long, lank, sun-burnt fellows, of six feet high, and still growing I believe, who can tell you the only way in the world to get a barrel of nubbins off a certain piece of land, and who, *upon his own ground*, could beat the world in making corn.

The Cultivator intimates that it could have made its list still longer, and we all know a long list is something, especially in the bragging line. Let him, then, do his best, and I will engage for every man he can produce, north of the Potomac, who raises a hundred bushels to the acre, to find *two* at the *South* that do not get five; so we will beat him in length of list at least.

In the list referred to in the Cultivator, except on the virgin lands of Kentucky and Ohio, this product is confined to little patches. Nor do I believe that in any of the older States such a yield is attainable, except at great expense and the consumption of fertilizing manures that would exhaust upon a few acres all the attainable means of an ordinary farmer. But I do believe, that there are thousands of acres of our own lands now yielding less than five bushels to the acre, that, by a judicious system of improvement and a concentration of means upon a smaller space, might be made to yield a permanent average of ten or twelve barrels to the acre. He would be a public benefactor, who would by actual experiment demonstrate this fact to the people of Virginia. I do not mean the fact, that, by annual hauling of manure from our towns, land can be made to yield ten barrels of corn to the acre, but that by a judicious system of cultivation, the resources of the farm itself will produce this yield. There is no man who would not be willing to exchange a hundred acres of land yielding five barrels to the acre, for fifty acres that would give him ten barrels to the acre; and yet, by selling the fifty acres and bestowing the proceeds on the remaining fifty, I believe, in nine cases out of ten, the same result might be obtained.

The old notion that large crops of corn cannot be made in this climate, that it must have "distance" to keep it from "firing," begins to be exploded. Firing is now considered to be a failure for want of nourishment, which a hot sun quickly evaporates from a shallow soil: therefore the hotter the sun, the deeper and richer should be the soil, and the greater will be the crop of corn.

It is astonishing what an effect one individual will have upon a neighborhood. I have sometimes seen a clever improving farmer settle down in a province of Bœotian darkness: at first he is looked upon with distrust, and even derision, if he is known to get an agricultural newspaper from the post office: but in a little while, the result of superior management becomes apparent, and one of two consequences ensues: his neighbors either begin to imitate him, or they remove their quarters.

It is utterly impossible that any man can continue to make one barrel alongside of another, who makes twelve to the acre; he must either yield or fly, and in this way it is, that one good example often reforms a neighborhood.

Your obedient servant,

A Reformer.

FALL PLOUGHING.

To the Editor of the American Farmer:

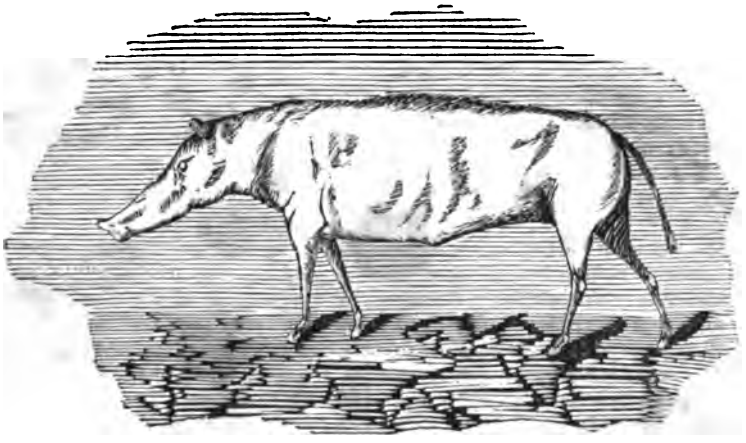
Sir,—I have been for a long time anxious to controvert, as I conceive, a very erroneous system in agriculture, but one which seems to be adopted by most of the writers for your valuable journal. I allude to the too prevalent opinion that clay soils should be broken up in the fall in order to prepare the land, by the action of the frost, for the next year's crop. Now my limited experience has taught me that there is no system more injurious than this, and had not distrust of my ability to do the subject justice, restrained me, I should long since have protested against a practice so destructive to the soil. I confess that my reluctance to attack a system, so generally advocated, has been much increased by finding this doctrine partially advocated in a work, which should be in the hands of every agriculturist, published by the late Judge Buel, and called "the Farmer's Companion." But as I believe the true interests of agriculture require that all subjects should be thoroughly discussed and tried before they are engrafted upon the system, I feel compelled to raise my feeble voice to contend that there is nothing more destructive to land than exposure, without some covering, to the effects of either frost or sun, and that no land intended for culti-

vation the next year *can* be benefited by fall ploughing, but *must*, on the contrary, be very materially injured. Most of the advocates of this system insist that by fall ploughing the clay soils will be pulverized through the winter by the frost, and thereby rendered more easy of cultivation in the spring. If such is the fact, which I deny, the clay on my farm must be of a very peculiar nature, because I have, now before my eyes, a field most of which was ploughed in fine weather in January, but the cold weather coming on prevented its completion, and the residue was ploughed in the spring, and it took much more time to put the land, ploughed in the winter, in good order for corn than it did that which was ploughed in the spring. The winter ploughed land, in place of being well pulverized by the frost, had run together like putty, and if the advocates of fall ploughing could only see the difference in the looks of the crop and land at present, I think we should no longer disagree. The corn on the land ploughed in the spring is so far superior to the other that I am constantly asked the cause of the difference by strangers, and the land has been much easier to cultivate during the whole season, than the other. If these remarks shall elicit something from more experienced agriculturists on this subject, my object will be fully attained, and the cause of agriculture advanced.

C.

We know many very judicious farmers who go out and out against fall ploughing, upon the principle of *covering* instead of *exposing* the surface; but even amongst its advocates, that kind of clay soil which "runs together," is almost universally excepted.

SAND HILL HOG.



We transcribe from the "Western Farmer" the following capital description of an old stock, under a new name. The species is not altogether extinct in this region, but probably it increases in value as it grows scarcer. If Mr. BEMENT, or any of our northern friends, should desire to cross their Berkshires with this *improving* breed, we think we can undertake to procure them as pure a specimen of genuine blood as ever rooted in the sand hills of Alabama.

Alabama, July 10, 1842.

Mr. Editor,—There has been much said and written of late years about imported, and what are called *improved*, breeds of pigs; and I hope you will indulge me, in a few practical remarks on this subject. I am a *practical* farmer, and have profited much by experience and observation, and think I have learned something about "fancy stock."

The "animal" which I wish to bring to the especial notice of your readers, is, what may be called the "Cotton Planter," or what is commonly called the "Sand Hill Hog."

I am sorry that I have not a specimen before me; but I give you above, from memory, a pretty faithful sketch of a favorite old stock boar of one of my neighbors, who, I think, possesses the "purest blood" in South Alabama. The picture is the more faithful, as you will perceive that his ears bear strong evidence of having

been gnawed off by dogs while depredating on corn fields.

There are many disputes about the characteristic forms of different breeds of hogs, but about this there can be no dispute—*the blood speaks for itself*. Just look at the magnificent animal above, and say whether any one can be so stupid as to confound it with the Berkshire or any other living animal? The long, clean, bony head—the thin, flat, lean body—the delicate razor-blade legs—the remarkably small hams—the straight tail, all bespeak *genuine blood*; color in a hog is nothing; the form is the thing we are all after.

About the origin of this hog there is much difference of opinion amongst naturalists; but the most plausible opinion is, that it is descended from what is called the "Sanglier," or wild boar, in France. It is found still in many parts of Europe, and is the hog from which the celebrated Westphalia hams are made. The meat of ours is quite as delicate, and never has that gross, disgusting taste which our western bacon has; it is the only thing of the kind a gentleman should eat; and, as *you* well know, it is from this hog that the delicious hams of Carolina are made.

They require little or no feeding. On my father's farm, (which was in the Sand Hills,) my business was minding the hogs, when a boy; and I very well recollect that from two to three shirt tails full of corn, was considered a very liberal allowance a year, per head. They have the rare talent of providing for themselves, and if food is not to be found in the woods, they are sure to find it in somebody's corn field—their flatness giving them great facility in slipping through fences.

I have never seen the experiment tried myself, but I am informed by my friend, Col. John Smith, (who has been extensively engaged in stock breeding,) that a very remarkable, and in fact almost incredible transmogrification is produced in the "Sand Hill Hog," by putting him up when young, and feeding him bountifully on corn. The form is made to assume a marvellous resemblance to the Berkshire!! and the tail, which is naturally straight, is made to curl as beautifully as the ringlet of a young lady.

But the most valuable and characteristic trait remains still to be told, viz: his great *activity* and *speed!* It is well known at the South that the negro is the natural enemy of the whole hog race—it is indispensably necessary that we should have a hog that can *out run* a negro, fair race, and, as they say in Kentucky, a negro "can't hold a torch for a Sand Hill hog to run by." This remarkable and important fact, was first brought to my notice by Gen. Wade Hampton, who was a great connoisseur and had a great fancy for all kinds of fine stock. As he expressed it, a duck-legged Berkshire stood no chance on a cotton plantation.

Yours, &c. N.

P. S.—If you or any of the breeders in your section, wish to have some of the genuine 'Cotton Planter' stock, I shall be happy to supply you, on *reasonable terms*. Prices from $100 to $500, according to age and *form*. Breeders cannot be too cautious about the character of the person from whom they purchase. I believe I can conscientiously say, (and my neighbors will bear me out,) that I never intentionally told a falsehood, when the truth would answer my purpose; and every body here knows that my stock of hogs is unsurpassed.

GOOCHLAND FAIR.

We take great pleasure in announcing to the public that a fair will be held by the Agricultural Society of Goochland at their Courthouse, on the 9th day of November next, when the usual premiums will be bestowed. We hope the attendance may be full, as we are sure the exhibition will be highly interesting.

For the Southern Planter.

GAPES.

Mr. Editor,—As you are fond of "fried chickens," (Planter, page 186, August number,) and correctly state the *cause* of a prevailing disease among them, together with a remedy, but an ineffectual one, in my opinion, I will give you a *theory* of that *cause*, which will suggest a preventive of the disease. The worms in the lungs of the chicken are produced from the inhalation of the eggs of the hen lice. The minute eggs are deposited on the feathers and down of the hen, and the chicken being hovered over by the hen, the eggs are drawn into the cells of the lungs at each inspiration, which hatch and produce the worms, and the worms suffocate the chicken.

Sulphur and tobacco about the nest of the hen, during incubation, and a perfectly clean hen-house, with *lime* in abundance sprinkled on the floor and roosts, will constitute an effectual preventive of the gapes. These articles, you perceive, are intended to destroy the *lice of the hen*, which being done, the worms and the gapes will never appear.

A great variety of diseases in hogs and sheep, particularly, as well as in other animals, arise from a like cause. In fact, sir, this branch of pathology, has been greatly overlooked by writers on the diseases of man and the inferior animals. *Animalculæ* and *their eggs*, being inhaled into the cells of the lungs, and often swallowed, generate fatal diseases which are attributed to

miasmata. Volumes might be written, illustrating this deeply interesting subject, but perhaps it would be foreign to your useful journal.

Excuse this digression, as well as the apparent insignificance of the subject. Yet how beautiful and interesting does a little fact become, when it happens to be the nucleus, as it were, of a great principle.

Yours respectfully, L.

From the South Western Farmer.

CRAB GRASS HAY—RESULTS OF EXPERIMENT.

Messrs. Editors,—Last winter I determined to make a number of experiments to increase the quantity of good food for my stock. Amongst others to see if the grass commonly called crab grass, could not be made a profitable substitute for the timothy of the North. I selected a piece of common oak ridge land, which had been in cultivation about five years, and in the early part of March caused it to be ploughed and cross ploughed with one of Hiram Sloop's best ploughs, running about six inches deep; then harrowed smooth and fine with an iron-tooth harrow, and with this cultivation left it to produce its crop of grass. On yesterday I finished my hay making and stacking. I measured the ground carefully, and found it contained three and a half acres (a fraction under.) I weighed an average load of the hay and find that I have obtained a few pounds over two and a fourth tons of hay (as good as I ever saw) to the acre.

The expense of producing, curing and housing I estimate as follows:

Rent of three and a half acres of land at $2 per acre,	$7 00
Man and team six days ploughing and harrowing at $1,	6 00
Two men two days mowing at 50 cents per day, each,	2 00
Eight hands two days curing, hauling, stacking and housing at 50 cents per day each,	8 00
Use of wagon one day, driver one of the 8 hands,	2 50
Cost	$25 50
Value of product—Seven ton and seven-eighths hay at $10 per ton,	78 75
Profit	$53 25

The above estimate of cost and value may not be satisfactory—the data are correct, and each man may make his own estimate. The product is above the quantity stated, for none of my people had ever seen an attempt to mow, and consequently the work was at first very badly done—probably a fourth of the grass left. They soon improved, and about half the ground was well mown.

Query. May we not supply ourselves with hay, and sell to our stable keepers cheaper than we can import it from the North? I think we can make, and send it to New Orleans on a fine profit. DANIEL MAYES.

Mt. Verd, Aug. 5, 1843.

We have over and over again cut the crab grass from our corn fields, to which it seems indigenous, and we have ever found that our horses esteemed it a *bon bouche*, for which they would leave any other kind of hay: its fattening qualities too are well known to those who have turned young colts into a corn field. But we have never cultivated this grass as a separate crop, nor would we, notwithstanding Mr. Mayes' imposing array of figures, care to do so: for although as a feed we place the very highest estimate upon this grass, as an improver, it is worse than useless. To make it nutricious it must be permitted to go to seed, which renders it an exhauster. Moreover, it disappears entirely with the first frost, leaving no sod, robbing the land and returning nothing to it.

For the Southern Planter.

PROPER DISPOSITION OF FARMING CAPITAL.

Mr. Editor,—Every man in this country is more or less interested in the pursuit of agriculture; and the business of a commission merchant has rendered me as deeply sensitive to its interests as if I were directly engaged in its pursuit. After much consideration and attention, I am inclined to think that the want of success in this profession, proceeds from an error that I have frequently observed in my own. This consists in an attempt to do a larger business than is justified by the quantity of capital employed. It is true, that sometimes a "lucky hit" in trade will make all right, but ninety-nine times out of a hundred, failure is the inevitable result of an expansion disproportionate to the quantity of capital to be commanded.

How often do you see an individual with a limited capital embarking in the profession of a farmer, expend it all in the purchase of his land; which is about as reasonable as it would be in a merchant to sink his whole capital in a warehouse, without leaving any for the purchase of goods. Neither the one nor the other would be wiser than the silly fellow, who expended his last cent in the purchase of a purse.

I have grown grey in the pursuit of commerce, and it may be deemed presumptuous in an individual engaged in one pursuit to pretend

to advise those in another calling; but the looker on can sometimes see what escapes the attention of the player, and for the last forty years I have been a not inattentive or uninterested spectator of the progress of an art on which my own pursuits were founded, and with which they were so intimately blended. It seems to me, then, nothing would more promote the cause of agriculture than a judicious division of the capital embarked in it. To make this division constitutes a rather difficult sum in arithmetic, one of the quantities only being known, but a practical man with a little calculation, can readily approximate it without even a recourse to algebraical signs. Suppose an individual desires to engage in farming, and that he has, we will say, ten thousand dollars to embark in the business. The first object is to ascertain how much land he should buy. Let him remember that it is only a certain degree of fertility that will pay for cultivation, and that within reasonable limits, the greater the fertility the greater will be the profit upon the investment. My advice to him would be to be satisfied with nothing that would not yield eight barrels of corn and twenty bushels of wheat, at least, to the acre. We will suppose that such land in the location he chooses will cost forty dollars an acre: very well, let him reserve four thousand dollars to purchase negroes, stock, implements, &c. and to afford him floating capital for at least one year's operations: this leaves him six thousand dollars for the purchase of one hundred and fifty acres of land. It is a small farm, it is true, and the owner could not be esteemed a great landed proprietor; but it is well stocked, well provided, very productive, and the owner with every thing well fixed and comfortable, free from debt and with a provision for accidents, is enabled to devote his whole energies to his business. How certain in such a case would be the annual improvement of his land, or the annual extension of his acres.

But let us contrast with this operation the course usually pursued by those investing in real estate. From an inordinate desire that seems to be born with us here in the South, to be the owners of "broad acres," the whole capital is expended in an extensive and barren waste, or probably half the purchase money paid, and a debt incurred for the balance. Little or nothing left for stock or implements, which are probably bought on credit, and are frequently of the rudest and poorest kind. Already saddled with a heavy debt, the interest on which begins to stare him in the face and haunt his imagination in his dreams, what does it avail to tell this poor wight of some improved implement of agriculture or of a judicious system of husbandry? Why, if you advise him to pay a dollar a year for an agricultural newspaper, he replies, and with a great deal of truth indeed, that "he can't afford it." There is a perpetual struggle upon the part of this great *land owner* to keep body and soul together, and instead of ease, thrift, and improvement, he exhibits from year to year the increasing marks of care, poverty and want; until at last his great estate slips through his fingers and falls into the possession of some individual, perhaps, who having the means of improvement, doubles or quadruples the product, and thereby makes the whole an excellent investment.

It may be said that land worth forty dollars cannot always be found in situations to which particular circumstances may confine an individual. Let the purchaser then give ten dollars an acre for one hundred and fifty acres, and reserve the balance of the six thousand dollars for improving it; he must be very unfortunate indeed if he does not succeed in a few years in bringing it up to the forty dollar standard.—What I mean to maintain is, that it would form a much more profitable investment, generally speaking, to buy one hundred and fifty acres of such land for fifteen hundred dollars, keeping thirty-five hundred dollars to improve it, than to pay the whole six thousand dollars for six hundred acres.

I have been led into these considerations by conversations which I have held with many of our farmers, who, apart from this common error into which they have fallen, are sound and judicious men. I have found universally a much greater want of ability, than of desire, to improve. I say ability to improve, because I believe the improvement of poor land without money is a very slow business; to a man in debt, it is unattainable.

There are in Virginia a great many rich men owning extensive tracts of land that yield them little or no revenue. Suppose such an one would lay off a tract into farms of one hundred and fifty acres; erect neat, cheap and convenient buildings, and offer them for rent on long leases to substantial, moral men, to be cultivated upon particular systems, prescribed by the landlord.

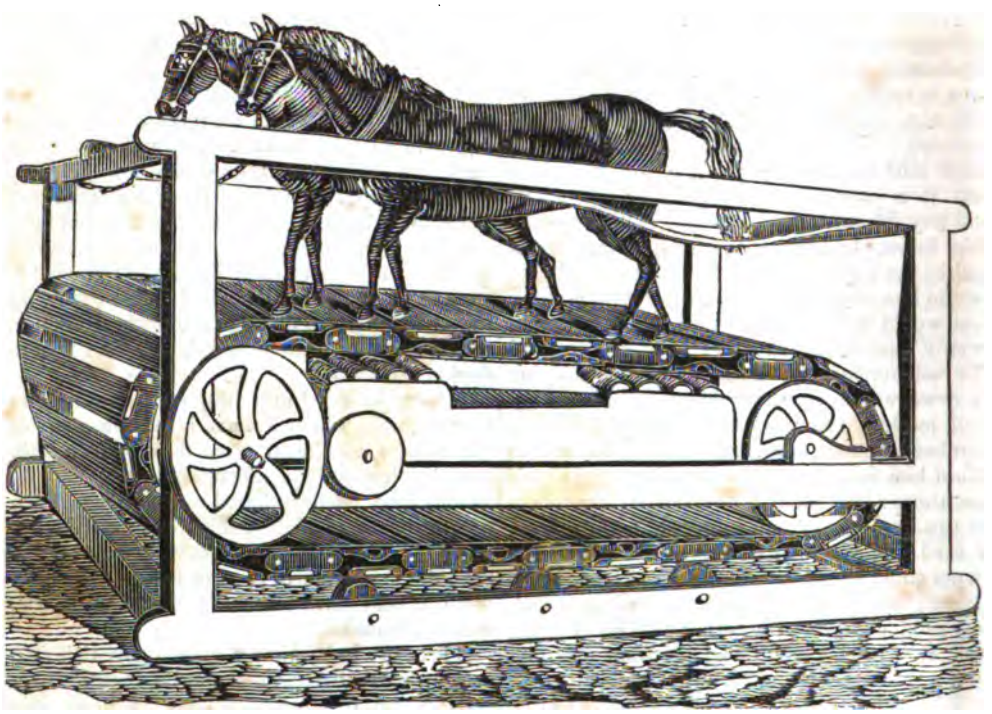
By the purchase of a few good negro mechanics, the buildings could be erected very economically, the material being generally to be found on the spot, and it seems to me that tenants could be readily obtained on terms that would make the investment an excellent one.—Fifteen hundred acres so disposed of, might, by judicious restrictions in the leases, be converted into a splendid estate in twenty years. If it only paid six per cent. on the improvements in the meantime, it would constitute a safe and capital investment. There are many good and substantial men in the country, who have capital enough to farm it advantageously, if they could only rent good land on fair terms, who are sure to fall through when they attempt, with their limited means, to purchase for themselves.

If these suggestions should excite the attention of those much better qualified to discuss all the questions appertaining to the art of agriculture, than one, who has never been connected, except incidentally, with its pursuits, my object will have been attained.

Your obedient servant,

A MERCHANT.

HALL'S PATENT HORSE POWER.



The engraving represents a horse power lately invented by Mr. H. G. Hall. It is of the treadmill character, and, as the patentee conceives, is infinitely superior to any other horse power in use. Its chief peculiarity consists in the particular form of the revolving floor and the use of friction rollers, by which the weight is entirely taken off the axletrees.

We take particular pleasure in bringing to the consideration of our readers any improvement in horse powers; for there is no machine for which there is a greater demand, and none in which improvement is more required. As at present constructed, they are heavy, expensive, and complicated, very liable to get out of order, and by no means adapted to the wants of the farmer.

Of this machine of Mr. Hall's we are hardly prepared to speak, having seen nothing of it except a small model, which has impressed us with a very favorable opinion of its merits. If it is one half what the inventor claims for it, there must be a universal demand for it in the State of Virginia.

It is only adapted to two horses, with which Mr. Hall asserts he will do all the work that can be accomplished with *four* upon any other machine.

We understand that rights have already been sold in some thirty counties in the State, and that preparations are now making for building the machines in Rockbridge, Lynchburg, and other places. Our citizens will thus soon have an opportunity of settling its merits by that best of all tests, experience, and we shall be pleased to learn the result.

For the Southern Planter.

BEEHIVES.

Mr. Editor,—I find in your last Planter a request from some individual for information upon the comparative merits of different beehives. I would recommend no hives to the gentleman wishing to make honey. Direct him to build a house eight by six, ceil it well, and have a door with lock and key, also two small windows, two feet in length, wide enough to allow the bees to pass through. In this house let him place all of his hives. The darkness of the house prevents the foolish rattling of tin pans and bells, also the destruction of valuable fruit trees and ornamental branches. After the bees fill the hives, they will continue their working operations on the side of the house, or on the benches, never swarming again. In addition to this, muriate of soda or common salt, the most powerful preventive to the worm, can be placed under each hive, which could not be used effectually in a situation exposed to wet. The room should be made as dark as possible, admitting no light except through the windows. By attending to the above, no man will want for honey.

Yours, respectfully, MOHICAN.

Mohican, Aug. 10, 1843.

The following is taken from an old number of the "Cultivator," and is worthy of preservation both as an admirable imitation of a style which has been rendered immortal by the sayings and doings of SAM'L SLICK, Esq., and for the intrinsic merits of the matter. We rather think Nick Bradshaw has "imigrated to a warmer climate," and we are very much mistaken if we did not meet with him about three weeks ago on a piece of land that "had run out," not more than forty miles from the city of Richmond.

A LOOKING GLASS.

J. BUEL, ESQ.

Dear Sir,—When I was a boy, I can well remember how I used to be induced to wash my smutty face, by having a looking glass held before my eyes. For the same purpose, I have extracted the following picture of "a farmer," from the writings of that most eccentric and excellent writer, "Samuel Slick," in the hopes that if any of your readers should happen to see any part of himself therein, that he will improve by the view. Here it is.

"* * * That critter, when he built that wrack of a house, (they call 'em a half house here,) intended to add as much more to it some of these days, and accordingly put his chimbley outside, to sarve the new part as well as the old. He has been too "busy" ever since, you see, to remove the banking put there the first fall, to keep the frost out of the cellar, and consequently it has rotted the sills off, and the house has fell away from the chimbley, and he has had to prop it up with that great stick of timber, to keep it from coming down on its knees altogether. All the winders are boarded up, but one, and that might as well be, for little light can penetrate them old hats and red flannel petticoats. Look at the barn; its broken back roof has let the gable eends fall in, where they stand staring at each other, as if they would like to come closer together (and no doubt they soon will,) to consult what was best to be done to gain their *standing* in the world. Now look at the stock; there's your "improved short horns." Them dirty looking, half starved geese, and them draggle-tailed fowls that are so poor the foxes would be ashamed to steal them—that little lantern jawed, long leg'd, rabbit ear'd runt of a pig, that's so weak it cant curl its tail up—that old cow frame standing there with her eyes shut and looking for all the world as tho' she's contemplating her latter eend—(and with good reason too,) and that other reddish yellow, long wooled varmint, with his hocks higher than his belly, that looks as if he had come to her fimeral, and which by way of distinction, his owner calls a horse—is all "the stock," I guess, that this *farmer* supports upon a hundred acres of as good natural soil as ever laid out door. Now there's a specimen of "Native Stock." I reckon he'll imigrate to a warmer climate soon, for you see while he was waiting to finish that thing you see the hen's roosting on, that he calls a sled, he's had to burn up all the fence round the house, but there's no danger of cattle breaking into his fields, and his old muley has larnt how to sneak round among the neighbors' fields o' nights, looking for an open gate or bars, to snatch a mouthful now and then. For if you was to mow that meadow with a razor and rake it with a fine tooth comb, you couldn't get enough to winter a grasshopper. 'Spose we drive up to the door and have a word of chat with Nick Bradshaw, and see if he is as promising as outside appearances indicate.

Observing us from the only light of glass remaining in the window, Nick *lifted the door* and laying it aside, emerged from his kitchen, parlor and smokehouse, to reconnoitre. He was a tall, well built, athletic man, of great personal strength and surprising activity, who looked like a careless good natured fellow, fond of talking, and from the appearance of the little old black pipe which stuck in one corner of his mouth, equally so of smoking, and as he appeared to fancy us to be candidates, no doubt he was already enjoying in prospective the comforts of a neighboring tap room. Just look at

him—happy critter—his hat crown has lost the top out, and the rim hangs like the bail of a bucket. His trowsers and jacket show clearly that he has had clothes of other colors in other days. The untan'd mocasin on one foot, which contrasts with the old shoe on the other, shows him a friend to domestic manufactures; and his beard is no bad match for the wooly horse yonder.—See the waggish independent sort of a look the critter has, with his hat on one side and hands in his breeches pockets, contemplating the beauties of his farm. You may talk about patience and fortitude, philosophy and christian resignation, and all that sort of thing till you are tired, but—ah, here he comes. Morning Mr. Bradshaw—how's all home to-day? Right comfortable, (mark that—comfort in such a place,) I give thanks—come, light and come in. I'm sorry can't feed your hoss—but the fact is, tan't bin no use to try to raise no crops, late years, for body don't git half paid for their labor, these hard times. I raised a nice bunch of potatoes last year, and as I couldn't get nothing worth while for 'em in the fall, I thot I'de keep 'em till spring. But as frost set in, while I was down town 'lection time, the boys didn't fix up the old cellar door, and this infarnal cold winter froze 'em all. I'ts them what you smell now, and I've just been telling the old woman that we must turn too and carry them out of the cellar, 'fore long they'll make some of us sick like enough—for there's no telling what may happen to a body late years. And if the next legislator don't do something for us the Lord knows but the whole country will starve, for it seems as tho' the land now a days won't raise nothing. It's actually *run out*. Why, I should think by the look of things round your neighbor Horton's, that his land produced pretty well. Why, yes—and it's a miricle too, how he gets it—for every body round here said, when he took up that tract, it was the poorest in the town.—There are some folks that thinks he has dealings with the "blackart," for't does seem as tho' the more he work'd his land, the better it got.

Now, here was a mystery—but an easy explanation of Mr. Slick soon solved the matter, at least to my mind. The fact is, says Mr. Slick, a great deal of this country is *run out*.—And if it want for the lime, marsh-mud, seaweed, salt sand, and what not, they've got here in such quantities, and a few Hortons to apply it, the whole country would *run out* and dwindle away to just such great, good natured, good-for-nothing, do nothing, fellows as this Nick Bradshaw, and his woolly horse, and woolless sheep, and cropless farm, and comfortless house, if indeed such a great wind rack of loose lumber, is worthy the name of a house.

Now, by way of contrast to all this, do you see that neat little cottage looking house on yonder hummock, away to the right there, where you see those beautiful shade trees. The house is small, but it is a *whole* house. That's what I call about right—flanked on both sides by an orchard of best grafted fruit—a tidy flower garden in front, that the galls see to, and a most grand saree garden jist over there, where it takes the wash of the buildings, nicely sheltered by that bunch of shrubbery. Then see them everlasting big barns—and by gosh, there goes fourteen dairy cows—as sleek as moles. Them flowers, honeysuckles and rose bushes, shows what sort of a family lives there, just as plain as straws show which way the wind blows.

Them galls an't 'tarnally racing round to quiltin and husking frolics, their feet exposed in thin slips to the mud, and their honor to a thinner protection. No, no, take my word for it, when you see galls busy about such things to home, they are what our old minister used to call "right minded." Such things keep them busy, and when folks are busy about their own business, they've no time to get into mischief. It keeps them healthy, too, and as cheerful as larks. I've a mind we'll 'light here, and view this citizen's improvements, and we shall be welcomed to a neat substantial breakfast, that would be worthy to be taken as a pattern by any farmer's wife in America.

We were met at the door by Mr. Horton who greeted my friend Slick with the warm salutation of an old acquaintance, and expressed the satisfaction of one habitually hospitable, for the honor of my visit. He was a plain, healthy, intelligent looking man, about fifty, dressed as a farmer should be, with the stamp of "HOME-SPUN" legible upon every garment, not forgetting a very handsome silk handkerchief, the work throughout of his oldest daughter. The room into which we were ushered, bore the same stamp of neatness and comfort that the outside appearance indicated. A substantial home-made carpet covered the floor, and a well filled book-case and writing desk, were in the right place, among the contents of which I observed several agricultural periodicals. I was particularly struck with the scrupulously neat and appropriate attire of the wife and two intelligent, interesting daughters, that were busily engaged in the morning operations of the dairy. After partaking of an excellent substantial breakfast, Mr. Horton invited us to walk over his farm, which, though small, was every part in such a fine state of cultivation, that he did not even express a fear of "starving, unless the legislature did something to keep the land from running out."

We bade adieu to this happy family, and proceeded on our journey fully imprssed with the contrast between a good and bad farmer, and for my own part, perfectly satisfied with the

manner that Mr. Slick had taken to impress it indelibly upon my own mind.

Mr. Slick seemed wrapped in contemplation of the scenes of the morning for a long time.—At length he broke forth in one of his happy strains. "The bane of this country, 'Squire, and indeed of all America, is having TOO MUCH LAND—they *run over* more ground than they cultivate, and crop the land year after year, without manure, till it is no wonder that "*it's run out.*" A very large portion of land in America has been "run out," by repeated grain crops and bad husbandry, until a great portion of this great country is in a fair way to be ruined. The two Carolinas and Virginny are covered with places that are "run out," and are given up as ruined, and there are a plagey site too many such places all over New England, and a great many other States. We havn't the surplus of wheat that we used to have in the United States, and it'll never be so plenty while there are so many Nick Bradshaws in the country.

The fact is, 'Squire, edecation is ducedly neglected. True, we have a site of schools and colleges, but they an't the right kind. That same Nick Bradshaw has been clean through one on 'em, and 'twas there that he larnt that infarnal lazy habit of drinking and smoking, that has been the ruin of him ever since. I wouldn't give an old fashioned swing-tail clock to have my son go to college where he couldn't work enough to arn his own living, and larn how to work it right tu.

It actually frightens me when I think how the land is worked and skinned, till they take the gizzard out on't, when it might be growing better every day. Thousands of acres every year are turned into barrens, while an everlasting stream of our folks are streaking it off "to the new country," where about half on 'em after wading about among the tadpoles, to catch cat fish enough to live on a year or two, actually shake themselves to death with that everlasting cuss of all new countrys, the fever and agur. It's a melancholy fact, 'Squire, though our people don't seem to be sensible of it, and you nor I may not live to see it, but if this awful robbin' of posterity goes on for another hundred years, as it has for the last, among the farmers, we'll be a nation of paupers. Talk about the legislature doing something, I'll tell you what I'd have them do. Paint a great parcel of guide boards, and nail 'em up over every legislature, church and school-house door in America, with these words on 'em in great letters—"*The best land in America, by constant cropping, without manure, will run out.*" And I'd have 'em, also, provide means to larn every child how to read it, cause it's no use to try to larn the old ones—they're tu sot in their ways. They are on the constant stretch with the land they have, and all the time trying to git more, without improving any on't. Yes, yes, yes, *too much land* is the ruin of us all.

Although you will find a thousand more good things among the writings of "The Clockmaker," I hope you will not look for a *literal* copy of the foregoing. And if ever this meets the eye of the writer of the "Saying and Doings of Samuel Slick," I beg him to excuse me for the liberty I have taken with his own language.

I remain you agricultural friend,

SOLON ROBINSON.

THE SCIENCE OF AGRICULTURE.

The science of agriculture is yet in its infancy. The art has been practised for 6,000 years. But that art must be in a very imperfect state which is not sustained by science; for what is science, but a knowledge of general principles which serve to guide us in the practice of an art? These general principles can never be obtained with certainty but from a knowledge of all the facts, or as they are technically called, the *phenomena*, connected with a subject. Sometimes in the absence of such knowledge, ingenious guesses, properly called *hypotheses* are formed, but it is not until all the facts are known, and from them general principles and inevitable laws are deduced, that a science can be said to be established. In this sense we have as yet no science of agriculture, and all we can boast of are a few hypotheses, some of which are very crude indeed. In truth, we have not yet arrived at the facts which are the foundation, and of course we cannot yet erect the edifice. But the great difference between this and preceding ages, is, that in our day a spirit has been awakened which leads directly to the investigation of agricultural phenomena, and from them to the deduction of agricultural laws.

But as we have remarked before, there is no subject the phenomena of which are so mysteriously concealed, or so slowly developed, as those attendant upon agriculture: they are discernible only to the practical farmer; and to him only when endowed with powers of the greatest patience and investigation. When we reflect how many different statements are made with respect to the simplest fact in agriculture, all proceeding too from the most respectable sources, we may see at once how far we are from attaining yet a knowledge of the phenomena, which must be clearly ascertained before

we can pretend to establish the *science* of agriculture. All that we can do now is to observe diligently and report faithfully these phenomena as they occur, and the great value of agricultural papers, in our opinion, consists in the records they will afford to the future philosopher of well authenticated facts, from which he may deduce principles that will illumine the darkness in which its votaries of the present day are groping. But to attain this consummation, we must ascertain the facts. How is this to be done in the multitude of contradictory statements with which we are overwhelmed? Nothing can be ascertained as long as the statement of to-day is unsettled by the statement of to-morrow, coming from as authentic a source and carrying with it an equal weight of authority. There is only one way to settle these vexed questions; they should no longer be left to individual statements, but associations should be formed, who should institute experiments upon such disputed points as circumstances might dictate, and who, mindful of the responsibility devolved upon them, should diligently observe and carefully report the result in such a manner that the record should be made public for the present generation, and preserved for the next. If this plan were pursued with the zeal and ardor which has marked its adoption in particular instances, we should soon be furnished with stores from which principles might be deduced to revolutionize the art of agriculture.

SAVING SEED CORN.

Very few planters have paid that attention to the selection of seed for planting, that their own interests demand. It is a principle of vegetable as well as of animal life, that "like produces like." Every one who raises good stock, is not only aware of the truth of this, but he carries it out in his selections of animals to breed from. He selects his finest calves and pigs, and saves them from the slaughter pen, because, being well formed, large and thrifty, he believes that their offspring will possess these qualities. But although the same thing is true in the vegetable kingdom, he seldom thinks of availing himself of the advantage of a judicious selection in his seed for planting. Some few have tried it, and by care, and a judicious selection, year after year, have brought their corn to a high state of perfection; and their neighbors, seeing their success, have eagerly sought these improved seed. It would do well the first year, but after that gradually deteriorate to the common standard, and the whole thing would be pronounced a humbug. The humbug, however, was not in the original improvement, but in the subsequent neglect. The improver commenced by carefully selecting from his field those stalks that bore two fine, large ears, and laying them carefully aside for planting. The next year he selected with as much care from the product of his former selection; and by keeping up this system, reaped each year a richer harvest. Whereas, the other, who commenced with his neighbor's fine seed, by gathering indiscriminately into his barn, and selecting his seed from the mass in the spring, would be as likely to get the ears from an inferior as from a good stalk, and thus his seed would, by a law of nature, deteriorate to the common standard.

We believe that it is perfectly practicable to have almost every stalk bearing two good ears, on land where but one would be produced according to the usual method of selecting seed. This is not a mere opinion. It has been tried repeatedly, and with entire success, by various persons. What has been called the Dunton, the Cook, and the Williams corn, have all owed their celebrity to the judicious selection of seed for a series of years, by the respective gentlemen whose names they bear. True, it requires some little trouble to select every year; but every planter should have enough of professional pride in improving his system of husbandry, to take the necessary trouble especially when he is so richly repaid by an increased harvest.

Columbia Planter.

For the Southern Planter.

MECKLENBURG HOLE AND CORNER CLUB.

Mr. Editor.—Herewith you will receive a report made by a Committee of a Club upon the farm of B W. Leigh, Esq., which we should be glad to see published in your valuable paper.

Yours most respectfully,

R. A. PURYEAR, *Cor. Sec'ry*

Of the Mecklenburg Hole and Corner Club, No. 2.

Oakley, Mecklenburg, 21st Aug. 1843.

The Committee appointed to examine the farm of B. W. Leigh, Esq., have performed that duty, and report, that Mr. Leigh's farm, as known to most of our Club, was formerly the property of Mr. John Nelson. The most of it was cleared by him, and cultivated on the old plan, except that it was preserved by hillside trenching, executed with more than ordinary skill. When taken possession of by the present proprietor, there was scarcely any manured surface, and no attention had been paid to the cultivation of the artificial grasses.—

The present appearance of the farm evinces that great diligence has been used in rearing these grasses, and particularly clover, to which Mr. Leigh gives the preference over all other meliorating crops. He has successfully adopted the plan of keeping up his tobacco land with clover and plaster, and entertains the opinion, that any land adapted to the growth of clover may, with the aid of plaster, be improved to an almost unlimited extent. Mr. Leigh has, in fact, by the use of clover, plaster and other manures, made rapid progress in the improvement of his estate, and if he perseveres, there is no doubt, that in a few years, he will have the satisfaction of seeing the product of his estate doubled, although he is now reaping as abundant fruits of his skilll and enterprise, as any of his neighbors. He has nearly all his land in clover, and intends to continue seeding until the whole of it is seeded. The cultivated surface affords unequivocal evidence of agricultural skill and personal attention, well worthy of imitation. His corn field is clear and efficiently cultivated. His tobacco land is well prepared and planted. The committee differ with Mr Leigh in regard to the mode of laying off the corn rows between the hill-side trenches. Mr. Leigh lays off his rows by the upper-side of the trench, thus throwing the short rows on the lower side of the trench above, and exposing the land in a greater degree to the pernicious effect of washing rains. He assigns the following reason for the plan he pursues: That if in his sandy land the short rows are emptied into the ditch, the ditch will fill up, and subject the lands to greater damage than is likely to result from the plan he now pursues. This is a subject well worthy of inquiry and discussion, and one to which the attention of the Club is particularly invited.

The committee were struck with the neatness and attention evinced in regard to the plantation tools. They were good and well taken care of, and proved (what ought to be seen on every farm,) that there was a place for every thing, and that every thing was in its place.—This is a subject that the committee cannot too highly recommend to the attention of the Club. One of the great errors of Virginia management is the clumsy construction and abuse of the implements of the farm. A little neatness in construction and care in the preservation of them, will save much of time, labor and money.

Mr. Leigh's attention to his stock is another feature in his management worthy of note. His horses are always in fine order, and when at work are neatly and carefully geared, so as to avoid rubbing or galling, and insure good work. He is successful in raising pork, and supplies abundantly the demands of his family.

The committee must not omit to mention Mr. Leigh's wheat crop, which was truly a fine one, and clearly proved that good management in the preparation of the land, could overcome any supposed deficiency in its character, for the growth of that particlar crop.

The committee would remark finally, that with the addition of Mrs. Leigh, and a more commodious dwelling, he would have great reason to be contented with his lot.

P. C. VENABLE,
H. L. JEFFRIES.

From the Farmer's Cabinet.

THE MILK CELLAR.

It is a curious fact, but by no means unaccountable, that in many parts of the country the milk *cellar* is superceding the *spring-house*,—an appendage that has always been considered indispensable for the production of good butter, be the other qualifications of a farm and its appurtenances what they might. While on a visit to Wilmington, Delaware, I had occasion to remark the excellence of the butter at my friend's table, when he replied, he always selected the best cellar butter at market, for the use of his family, giving it as his firm conviction, that butter made in a cellar, was far preferable to that made in a spring-house, its great recommendation being in keeping sweet and good much longer, and retaining its fine flavor and color to the last, which spring-house butter would not do. And he observed, it is customary to account for the greater price which some dairymen obtain for their butter in market, by saying it is *cellar butter*; instancing the fact, in the high character of that made by Mr. Bryan Jackson, near New Castle, who never fails to obtain the top price of the market, for butter of the finest quality; he having a cellar that might be taken as a pattern for all that part of the country. Of course, it is readily admitted that much depends on the mode that is adopted in the management of the dairy, commencing with the breed and feed of cows, and ending with the manipulations of the butter; but the idea is gaining ground, that the best butter is to be made in a cellar, all other circumstances being equal: a remarkable revolution in public opinion, truly.

On reconnoitering among my friends, I found that several of them had substituted the cellar for the spring-house; and I do not know one who is not satisfied with the arrangement, except it be where the cellar is dug in a damp soil, or has been most injudiciously opened to the well, the evaporation from which fills the room with constant moisture, which may be found adhering to the walls, the ceiling and the woodwork, the shelves, and particularly the inside of the door, causing a damp and clammy feel, and a nauseous, mouldy smell, which the butter imbibes, to its lasting injury: indeed, no good but-

ter can be made in such places. But another revolution is taking place, even amongst the advocates for the cellar: it is no longer thought necessary to dig the cellar very deep, or to arch it over with stone or brick, with an air passage through it for ventilation—a *vault*, as it is more properly then termed: it is found sufficient, if the cellar be sunk a few feet below the surface of the earth, with a wide and shallow window on each side, the bottom of it level with the ground outside; well protected with a wire guard to keep out vermin, large flies, &c., and provided with a close glazed sash, which can be opened and closed at pleasure, by lifting it up to the *ceiling*, which ought to be no higher than the top of the windows; so that the air of the cellar can be ventilated by opening the windows of the two opposite sides, according to the way the wind sets at the time, shutting them quickly when necessary; for in cold, windy, or damp weather, the sooner the windows are again closed, the better. Indeed to the management of the cellar in this particular, much of the success of dairying is to be attributed; cold and damp air being unfriendly to the secretion of cream, and its proper and entire separation from the milk. Hence, therefore, it is a bad practice to set the pans on the brick floor of the cellar; they ought always to be placed around on shelves, about three feet in height, and these, after being well washed in hot water, should be wiped quite dry, that no mouldy evaporation might take place to spoil the butter. The air near the floor of the dairy is always impure, being loaded with acid vapors and putrid exhalations, the density of which confines it to the lowest part of the room; hence it is, that the doors of some dairies are made with lattice work, that the air near the floor, as well as that near the ceiling, might be ventilated at the same time; these lattices being furnished with sliding pannels, to be kept close in bad weather. The milk cellar ought always to have a northern aspect, and be well shaded by trees, not growing too near the windows, so as to impede a dry current of air, or to create a moist atmosphere; this consideration being of more importance than would readily be imagined.

Cellars thus constructed and carefully attended, will no doubt supercede the use of spring-houses generally, before many years have passed away; by which the business of the dairy will be rendered more agreeable, less laborious, and far less inimical to the health of those, particularly of females, whose occupation it is to attend to its never ceasing duties.

T. Miller.

Delaware, June 13th, 1843.

INDUSTRY.

The following anecdote may give encouragement to the industrious. Not long ago a country gentleman had an estate of £100 a year, which he kept in his own hands until he found himself so much in debt, that, to satisfy his creditors, he was obliged to sell the half and let the remainder to a farmer for twenty years. Towards the expiration of the lease, the farmer coming one day to pay his rent, asked the gentleman whether he would sell his farm. "Why, will you buy it?" said the gentleman. "If you will part with it, and we can agree," replied the farmer. "That is exceedingly strange," said the gentleman. Pray tell me how it happens that, while I could not live upon twice as much land, for which I pay no rent, you are regularly paying me a hundred pounds a year for your farm, and are able, in a few years, to purchase it?" "The reason is plain," answered the farmer, "you sat still and said *go*—I got up and said *come*—you laid in bed and enjoyed your estate—I rose in the morning and minded my business."

For the Southern Planter.

Mr. Editor,—Some of your correspondents have been advocating the skinning old field pine for posts, others burning them into coal for manure, but I prefer making coal of them for the purpose of curing tobacco. Suitable wood for curing tobacco has become scarce, and the labor of getting it to the barn is also considerable; but the coal may be carried from the kiln with but little labor. I have seen stoves, flues, &c., in operation, but am of the decided impression that curing with coal, and a small portion of wood, is the most perfect system I have ever yet seen. It makes a *strong regular* heat, free from sweat, and will cure the leaf uniformly through the house. My mode of using it is, first, to put down, what we planters call, bed logs, kindle the fires in the usual way, and then keep them up with coal alone, until the leaf is cured; the stalk and stem I cure with wood. The coal will burn more freely than a person unaccustomed to its use has any idea of, and those who have never adopted this mode of curing, will be almost certain to fire too hard the first trial, but practice will guide him after that. My motive for using a portion of wood is, to get the benefit of the smoke, which is *said* to be a necessary preservative to the plant. Three rows of fires, and never more than four, is sufficient for a house 20 by 24 feet. I cured the last year about 8000 sticks from the produce of four ordinary kilns, with the addition of wood, as above stated; and when the seasons are favorable for making tobacco, I get liberal prices.

Whilst on this subject, I will state that I think it a great error to have tobacco houses so close as to admit of scarcely any air; tobacco cured in houses of this sort, I think, go through too hard a sweat, but by having them moderately

close, with board roof, so as to admit air, the leaf will dry quicker, and you will retain all the valuable qualities of the plant. I have once been an advocate of *close* houses, but observing that the tobacco which hung about the door (for I never shut the door until the leaf is cured,) *generally cured nice, and before the balance of the house*, convinced me of the propriety of having my houses less close.

After having adopted this course, I conversed with a friend on this subject, he gave into my views, and stated that he had one very close house, in which it was but seldom he could cure well, whilst in an adjoining house of moderate closeness, he had no difficulty of curing to his taste.

The system of curing with stoves and flues, required that the houses should be made so close as to resist, as much as possible, the admission of air. Why is it that this practice was of such ephemeral existence? My impression is, that the tobacco was subject to so severe a sweat as to destroy, in a great measure, its oily properties.

Some of your subscribers contend that tobacco is an improver of land, others, that it is a destroyer. Some of my negroes in the year 1841 planted a portion of old land in tobacco, (no manure,) where corn and oats have been grown for the last 40 or 50 years; the tobacco was very inferior of course: The field is now in corn, and to my surprise, I find that the corn where the tobacco grew, is far superior to the rest of the field, and may be distinguished as far as the corn can be seen. Having given you the fact, I shall not attempt to account for it, leaving that to abler hands.

Wishing you and the Southern Planter a long and successful life, I remain, yours truly.

GULIELMUS.

N. B. As there is still some space on my sheet, I will give you the mode of keeping sweet potato seed in kilns, by myself and others in this section. We generally put them up in the patch where they are dug. Raise the earth six or eight inches in a circular form, as a kind of floor, sufficiently large for the quantity of seed you wish for one kiln; set a stake in the centre, merely as a guide to put the potatoes around, cover the earth with boards or pine bark, over this strew pine beards, then put on your potatoes, letting the kiln terminate in a point at the top; cover with the pine beards, say two or three inches deep, then with boards or bark, throw on earth until the kiln is covered at least six or eight inches deep; over this throw potatoe vines plentifully, to prevent the rains from washing the dirt down, and in the spring they will open in fine order. I design keeping my potatoes for table use in this way the next season. Some cover their kilns with leaves or straw, and erect a temporary scaffold (or shelter) over the kiln, but I prefer the vine as they are at the spot ready to throw on. The stake should not project beyond the top of the potatoes. I generally saw them off previous to covering the kiln.

G.

The following was taken from a newspaper several years ago:

"The following discovery was, a few years ago, communicated by the Royal Society of Sweden to that of London. After roofing a house with wood, boil some tar, and mix it with finely pulverized charcoal till it is of the thickness of mortar, spread this with a trowel about a fourth of an inch thick over the roof, it will soon grow hard, and defy all the vicissitudes of weather. Roofs thus covered have stood in Sweden over a century, and still want no repair."

G.

Charlotte, Va., August 5, 1843.

PLOUGHING IN GREEN CROPS.

Living plants contain in their substance not only all they have drawn up from the soil, but also a great part of what they have drawn down from the air. Plough in these living plants, and you necessarily add to the soil more than was taken from it—in other words, you make it richer in *organic* matter. Repeat the process with a second crop, and it becomes richer still—and it would be difficult to define the limit beyond which the process could no further be carried.—*Johnston's Lectures on Agricultural Chemistry.*

MILCH COWS.

The Editor of the "Agriculturist" informs us, that the unrivalled reputation of the milch cows of Jersey and Guernsey, has been obtained by the common adoption of a judicious scale of "points," with their relative values affixed. This scale, which we subjoin, will serve at least to remind many of our "good judges" of cattle, how vague and loose their ideas upon the subject have heretofore been, as we will venture to say that not one in fifty of those most accustomed to selecting cattle, has ever thought of fixing in his own mind the relation of one good point to another.

If we understand this scale correctly, it is to be used as follows:—Suppose a lot of cows to be exhibited for premium. No. 1 is examined, first, with respect to her family; perfection in this respect is denoted by 4 marks, the minimum being represented by one: her number is set down as she is entitled to the one or the other, or, as in the opinion of the judges, she ranges between the two. So with respect to

the other 8 points. The same process is gone through with each cow, and the one that in this way obtains the greatest number of marks receives the premium. Mr. Allen mentions that such is the particularity of these Islanders, that they esteem no cow worthy of a premium that cannot reach at least 21 marks.

It may be a matter of surprise to the uninitiated, as it was to us, to learn that the virtues of a milch cow do not lie in her bag, but that the udder is to be esteemed to the head, as 4 to 8. The following is the table by which these points are settled.

	points.
1. Breed on male and female sides, reputed for producing rich and yellow butter.	4
2. Head small, fine and tapering; eye full and lively; muzzle fine and encircled with white; horns polished and crumpled, tipped with black; ears small of an orange color within.	8
3. Back straight from the withers to the sitting on of the tail; chest deep and nearly of a line with the belly.	2
4. Hide thin, movable but not too loose, well covered with fine and short hair of good color.	2
5. Barrel hooped and deep, well ribbed-home, having but little space between the ribs and hips; tail hanging two inches below the hocks,	5
6. Fore legs straight and fine, thighs full and long, close together when viewed from behind; hind legs short, and bones rather fine; hoof small, hind legs not to cross in walking,	2
7. Udder full, well up behind; teats square and largely placed, being wide apart; milk veins large and swelling.	4
8. Growth.	1
9. General appearance.	2
Perfection for Cows.	30

SECRET WORTH KNOWING.

How to make three pair of boots last as long as six, and longer.

The following extract from Colonel Macarone's "Seasonable Hints," which appeared in the Mechanic's Magazine, dated February 8, 1838:—After stating the utility of sheepskin clothing for persons whose employment renders it necessary that they should be much out of doors, &c., he says, "I will not conclude without inviting the attention of your readers to a cheap and easy method of preserving their feet from wet, and their boots from wearing. I have had only three pair of boots for the last six years, (no shoes,) and I think I shall not require any others for the next six years to come. The reason is that I treat them in the following manner: I put a pound of tallow and half a pound of rosin into a pot on the fire: when melted and mixed, I warm the boots, and apply the hot stuff with a painter's brush, until neither the sole nor the upper leather will suck in any more. If it is desired that the boots should immediately take a polish, dissolve an ounce of beeswax in an ounce of spirits of turpentine, to which add a tea-spoonful of lampblack. A day or two after the boots have been treated with tallow and rosin, rub over them the wax in turpentine, but not before the fire. Thus the exterior will have a coat of wax alone, and shine like a mirror. Tallow, or any other grease, becomes rancid, and rots the stiching as well as the leather; but the rosin gives it an antiseptic quality which preserves the whole. Boots or shoes should be large, so as to admit of wearing cork soles. Cork is such a bad conductor of heat, that, with it in the boot, the feet are always warm on the coldest stone floor.

POT LIQUOR, SOAP SUDS, CABBAGE.

Pot liquor is a good food for hogs; and soap suds contains also some food, and is a good medicine. Neither of these therefore should be cast away, or otherwise used where hogs are convenient to the kitchen. But where there are no hogs, or none convenient, then the proper use of these articles is on the garden. From time immemorial it has been known that salt was a good manure for cabbages, and for ages it has been known that ashes (potash) was also a good manure for this vegetable. As to the action of two of the ingredients of the liquor and the suds, there then can be no question; and I assert under my own experience that the other ingredient, oil, is equally efficacious. I once put hogs lard and salt upon my cabbage, when full of lice; the lice quickly disappeared, and the cabbage improved. The extirpation of the lice I attributed to the action of the oil, for in twenty or thirty hours I could plainly see its dissemination throughout the cabbage; but in this opinion I have erred, for probably it was the salt. For aught I know, the application of soap suds might also destroy lice; but be this as it may, I have no doubt that both the liquor and suds are very valuable, not only for manuring cabbage, but many other garden and field plants. Oil will adhere to the cabbage, but soap suds and pot liquor will not, unless very greasy. It is evident then that the best method of applying liquor and suds, would be by the watering pot, and that night would be the most proper time; so that the water, and with it the potash and oil, may be taken up by the roots, before the next morning's sun. As to the quantity to be used on a cabbage, I cannot speak with pre-

cision, but suppose for a small plant a spoonful might suffice, and when nearly grown a gill; and perhaps three or four applications during the season would be abundant. Cabbage should never be planted more than one year on the same ground—they are equally good for men, cows, sheep, or hogs; and perhaps also for horses.

ZA. DRUMMOND.

Amherst County, August, 1843.

TESTS OF THE TEXTURE OF SOILS.

One of the best methods of ascertaining the capability of any soil to take up and retain moisture, is that described by Mr. C. Johnson, for which purpose he employs the apparatus referred to above.

a, is a small lamp; *b*, a stool, with a hole in the seat for receiving *c*, a shallow tin vessel, closely covered, but having a pipe, *d*, for the escape of steam; *h* is a pair of accurate scales, such as are used by apothecaries and goldsmiths. In order to employ this apparatus, put a small quantity of the soil to be tried upon the top of the tin vessel, in which water is kept briskly boiling for about half an hour, so as to thoroughly dry the soil by expelling its moisture. Take ten grains accurately weighed of this dried soil, and add to it, by means of a quill, a drop or two of pure water; if distilled water can be had so much the better. Weigh the whole a second time, which will now be a few grains above ten. Take out the weight of the water from the scale, leaving in the weights of the dried soil, and suspend the beam, so that the scale *e* may rest on the lid of the tin vessel, the water in which is still kept boiling; then with a stop watch note the exact time which the added water takes to evaporate, as will be shown by the beam of the balance becoming level. Mr. Johnson found that soils requiring less than twenty-five, or more than fifty minutes, to evaporate the added water, and bring the balance to a level, were always proportionally unproductive; the first from having too much flinty sand, and consequently too few interstices to allow the water to escape.

Rich soil treated in this way, required thirty-two minutes to bring the beam to a level; chalk, twenty-nine minutes; poor flinty soil, twenty-three minutes; and gypsum only eighteen minutes.

A very fertile soil from Ormiston, Haddingtonshire, containing, in 1000 parts, more than half of finely-divided materials, among which were eleven parts of limestone soil, and nine parts of vegetable principles, when dried in a similar way, gained eighteen grains in an hour, by exposure to moist air, at the heat of sixty-eight degrees Fahrenheit; while 1000 parts of a barren soil, from Bagshot Heath, gained only three grains in the same time.

Mr. Johnson farther found that one hundred parts of burnt clay, when exposed in a dry state for three hours to air saturated with moisture at sixty-eight degrees, took up twenty-nine parts of water; that gypsum, in similar circumstances, took up only nine parts, and chalk only four parts.

RICHMOND BUTTER.

We grieve exceedingly to hear that our remarks in the August Number, upon the character of the butter in the Richmond market, should have excited the ire of some of our female friends; perhaps they consider their characters as

housewives somewhat implicated in the charges made against the quality of the article with which we are supplied. We do not hesitate to say, that if any lady in the world makes bad butter, it is, we doubt not, in some way or other, the fault of her husband.

We should have been quite overwhelmed with the idea that any thing we had said should have given offence to the ladies, if we had not been in a measure, consoled by learning at the same time, that, with the generosity characteristic of the sex, they had determined to give us an opportunity of reforming our opinions, and that several "pats," were in preparation for the especial purpose of demonstrating to us the grossness of the libel we have uttered. We are always open to conviction, and we know no arguments more potent than those which appeal so powerfully to the *feelings* of an individual. Within the next twelve months we shall express our opinion on the subject again: in the meantime, we are prepared fairly to consider, and fully to discuss, any of these *arguments*, and upon conviction of our error, to make the most full and satisfactory reparation to any lady who may consider herself aggrieved by any thing we have heretofore written or spoken upon the subject.

HENS—EGGS.

If you wish for hens to hatch female chicks, select those eggs to set them which are distinguished for having smooth ends. Those which have their small ends roughened by concentric circles, and which are the most oval in form, produce cocks. It is a matter of importance, sometimes, to the grower to understand this fact. At least so thought Collumella.

Maine Cultivator.

OVERSEER'S WAGES.

To the Editor of the Southern Planter:

A communication over the signature of T. J. P., endorsed by you, on the subject of "Overseers' Wages," appeared in the first volume of the Southern Planter, with a suggestion that the subject would be again resumed; as it has not been, I presume he has recanted the views maintained in the communication. The proposition advanced in the communication alluded to was, that the giving of overseers an interest in the crops, instead of stipulated wages, had operated greatly to the injury of the farming interest in Virginia, and aided, in no small degree, to exhaust our lands; that the circumstances under which this practice originated had long since ceased to exist, to wit, the felling of lofty forests, when it was the interest of the owner to get as much land cleared as practicable, and to make as much as possible from his land and laborers; then an interest in the crop was a great stimulus to the overseer, a strong inducement to increase the proceeds of the farm.

Now I agree with you, that the necessity for felling lofty forests in Virginia, in a great degree, has ceased to exist, but that *the desire to make as much as possible from land and laborers* remains in full force and virtue, I certainly affirm, and to do which most successfully, I contend that the overseer should be interested in the crops; by this interest he is induced to apply the labor bestowed in by gone days, in felling trees, to the improvement of the fields; that whilst his employer's interest is advanced, that his will also be. He cannot say now, as when he received stipulated wages, "Soul, take thy rest," but eternal vigilance is his interest, the effects of which will be good enclosures, enriched lands, good teams, and increased crops. Try my plan, Mr. Editor, and if it fails, I will cease to prophesy.

R. R.

P. S. Can you inform me, through the Planter, whether the question is settled by agriculturists, which exhausts land most, wheat or oats?

It is no doubt very desirable that the interest of the employed should be, if possible, identical with that of the employer. But when the overseer receives a share of the crop it is his interest, the crontract running, as is usual, only from year to year, to draw from the land as much as possible during the year for which he is engaged, without any regard to future profits. On the contrary, the very best use that the proprietor can make of his force, sometimes, is, in the preparation for future increase: then, as far as improvement is concerned, the interest of the owner and the overseer are diametrically opposed. This system, we doubt not, has, in this way, proved injurious to the cause of improvement. Moreover, there is another objection to this mode of paying overseers' wages. To give a share in the crop, necessarily implies some authority in the management by which it is to be made. Two masters are always objectionable; they are generally destructive to that unity of purpose, by which alone any system can be sustained. A proprietor is generally a man of superior education, and should too highly appreciate the advantages of knowledge to permit his authority to be shared by an inferior. We may be told that it frequently happens that the overseer is a

better farmer than the proprietor; we know that such is too often the case, and until such a proprietor has, by dint of study and experience, qualified himself to assume his proper station, he had better leave all to his manager, taking care, however, that it shall be to his interest to prepare for future crops, whilst he makes reasonable drafts on the land for the present.

AGRICULTURAL APHORISMS.

NO. VI.

Partly Extracts.

One of the most remarkable features of modern times, is the combination of large numbers of individuals, representing the whole intelligence of nations, for the express purpose of advocating science by their united efforts, of learning its progress, and of communicating new discoveries. The formation of such associations, is in itself, an evidence that they were needed.

It is not every one who is called by his situation in life, to assist in extending the bounds of science, but all mankind have a claim to the blessings and benefits which accrue from its earnest cultivation. The foundation of scientific institutions is an acknowledgment of these benefits, and this acknowledgment, proceeding from whole nations, may be considered as a triumph of mind over empiricism.

Innumerable are the aids afforded to the means of life, to manufactures, and to commerce, by the truths which assiduous and active inquirers have discovered, and rendered capable of practical application.

Agriculture is the true foundation of all trade and industry—it is the foundation of the riches of states. But a rational system of agriculture cannot be formed without the application of scientific principles.

The life of plants is closely connected with that of animals, in a most simple manner, and for a wise and sublime purpose.

The presence of a rich and luxuriant vegetation, may be conceived, without the concurrence of animal life, but the existence of animals is undoubtedly dependent upon the life and development of plants.

Vegetable culture heightens the healthy state of a country, and a previously healthy country, would be rendered quite uninhabitable by the cessation of all cultivation.

We do not know what height and strength nature has allotted to plants; but this we know, that a plant gains another mouth and another stomach, with every new fibre of root, and every new leaf, consequently, as those organs are increased, so must the plant be nourished and enlarged.

All the innumerable products of vitality, resume after death, the original form from which they sprung. And thus death, the complete dissolution of an existing generation, becomes the source of life for a new one.

Heat and moisture are the principal agents, both in producing and destroying.

Which is cheapest, to fence up a permanent pasture for your cattle, or to fence up all the lands required for your agricultural purposes?

There is no way of making improvements in farming, but by experiments. If the farmer can conceive of a better mode of culture, or management, he should test its propriety by experiment; and if successful, he has performed an act which is serviceable to his country, and honorable to himself.

The lands of a nation are its principal capital; if these become so exhausted as to yield little more in products, than what is merely equal to the value of the labor bestowed on them, the condition of that nation must, in the general, be poor.

By highly improving a country, its population may be doubled or trebled, and by thus bringing the members of the community closer together, much labor is saved in their necessary intercourse; much in going to church, to mill, and to market.

Good culture, when bestowed on highly improved land, may be said to be a source of rational pleasure; whilst that which is usually given to land which is but poorly improved, is most commonly productive of much toil and vexation.

The killing of beasts for our use is lawful, but surely it is not lawful to torture them.

Lands are seldom so rich, but it may be matter of gain to increase their fertility; and few tracts are so poor, but with proper tillage and manuring, they may be made the residence of plenty.

In supplying animal and vegetable manure, a temporary food is only provided for plants, which is in all cases exhausted by means of a certain number of crops; but when a soil is rendered of the best possible constitution and texture, with regard to its earthy parts, its fertility may be considered as permanently established.

The deeper you plough, the thicker you may sow, for by deep ploughing the range for the roots is increased.

You had as well try to make a greenhorn write Greek, as to make land produce a crop which is contrary to its nature. If you wish to alter the crop you must alter the land.

The expense of any kind of tillage should never be regarded, where clear profit proportionately great may be expected.

A cornfield is not rejected because it has a few noxious weeds in it; neither should a

book be rejected only because it contains a few fallacious ideas.

Without a preparation of the mind, there are but few men who can retain a fortune suddenly bestowed on them; so in like manner there are but few earths which can retain a sudden gorge of manure.

Choose wisely, and apply as you may need.

ARGUS.

Amherst County, Va., Sept. 1843.

RED MAY WHEAT.

A gentleman who has a great repugnance to appearing before the public in his proper person, but whose name is only needed to any statement, to secure it the entire confidence of the public, placed at our disposal the following communication:

MR. C. T. BOTTS,

Sir,—I see the opinion expressed in your September number, that the Red May is a delicate wheat, and will not stand an ordinarily hard winter. My opinion and experience are directly opposed to this idea. Six years ago I purchased from the Messrs. Haxall, from wheat which they had bought from a farmer in Amelia, the *first of the variety* sown in this vicinity. The winter succeeding the seeding was the severest that had been known for 30 years, notwithstanding which this wheat came out splendidly. Three acres well improved, sown about 10th October, yielded I am confident, *at least* ninety bushels. It got a good start and looked beautiful at the commencement of the winter. We had two long and severe spells during the winter; one in January and another in February, and at each spell every spire seemed to be entirely killed; it appeared as if a fire had passed over it. After the first spell it soon recovered and presented a beautiful green appearance; the second spell appeared to have destroyed it again, but it soon grew out and yielded as above stated. The whole quantity sown, (26 bushels) considering the land, yielded more than any wheat I had ever sown. I am perfectly satisfied I never saw better wheat, but the reported weight was from 61 to 62 only. During the same fall, I procured from Mr. C. C. on the Mechanicsville Turnpike, a neat, practical farmer, 25 bushels of as fine looking *old fashioned* White May Wheat as I ever saw, and seeded it about the 1st November, in corn land, nicely prepared, which I expected to bring 10 bushels at least, to the acre, by the side of the Red May. It came up badly, and wore a sickly appearance from the start, and did not yield two bushels for one of seeded—it was so inferior, that I doubted at one time whether I would cut it. The seed might not have been good, but no one would have judged them to be damaged—they presented not the least sign of the slighest injury. The 26 bushels of Red May yielded upwards of 500 bushels of as fine wheat as I ever saw.

The next year I sowed the Red May entirely, but only 21 bushels—as I set out with a firm determination never to sow a bushel of wheat, except on land *capable* of growing at least 10 bushels to the acre. This crop was ruined the year of the 21 successive days of rain, during the blooming of the wheat. I sowed 13 bushels on poor land, manured on the fallow, and raked in, and 8 bushels on corn land, manured for corn, that ought to have brought under ordinary circumstances from 10 to 15 bushels to the acre. The fallow ripened 10 days before the other, and commenced blooming before the rains set in, whereas the other did not. I made upwards of 200 bushels from 21 seeded, the corn land not yielding more than 30 measured bushels of extremely light and indifferent wheat—that from the fallow weighed from 58 to 59—the heaviest I knew of that year. It was all sold in the neighborhood for seed, except what I kept for my own seeding.

My third crop was divided between the Red May and the Goose Wheat. The fall of this seeding was the driest ever known, perhaps—the crop was put into ground as dry as powder, there was not a particle of moisture in it. It did not rain from the time of seeding till some time in December, when very cold weather commenced, and did not come up, much of it, till spring. This being a new case to me, I of course despaired of making any crop at all. It came up very thin, but the weather proving favorable in February and March, it grew off to my utter astonishment. About the last of March, or first of April, I planted corn, after which we had a pretty good rain, and from that time to harvest, there did not, to the best of my knowledge, enough rain fall to wet the *wheat land* a half inch, and during this time heavy winds prevailed to a greater extent than I had ever observed before. I expected, of course, to make no crop, either wheat, corn or oats, without *good seasons*, but I was most agreeably disappointed. For a long time I disliked to see the wheat crop. In the morning I was a little cheered by its improved appearance, since the afternoon before. When the heat of the day came on, the blades would twist like the blades of corn in very dry and hot weather, (and some of the lower blades began to turn yellow and dry up,) but in the morning, from the dew of the over night, they would be out of twist again—and so it continued until ripe. The heads were very large, and the grain as fine as I ever saw. I made this year from 85 of seed, upwards of 900 bushels. Neither kind, the Red May nor the Goose, came up as thick as I

could have wished, but the former much better than the latter. The fly made an attack on a portion of the Red May, which was top-dressed, and damaged it materially, but did not touch the other, of either kind, immediately adjoining, and a part of the same piece—which *compelled* me to ascribe it to the top-dressing—the dressing served it with a comfortable shelter for the winter. The Red May is the prettiest wheat I ever saw grow—the straw being a beautiful gold color. The straw is rather slender and tall, which renders it more liable to *tumble*—and suffered to get too ripe before it is cut, it shatters very much—but this I consider no fault, as all wheat, by universal consent, ought to be harvested in the dough state—the grain being firmer and plumper, than if suffered to stand till thoroughly ripe.

This crop satisfied me that wheat, and *even* corn can be made with but little rain. Deep and discreet cultivation, with showers "*few and far between*," will make respectable crops of either. The wheat crop with us, I think, ought to be sown from the 10th to 20th October. To avoid the fly and make the best crops, it is important that it should take vigorous root, if possible, before the winter. I have advised some of my friends to sow the Red May, and if upon strong land, such as wheat ought to be put in, I have offered to insure against the fly and rust. Upon a good clover fallow, or manured land, (the manure to be put under the surface,) the fly may feed plentifully, and still have enough to yield a fine crop. The wheat will grow, if the season is good, faster than the insect can eat it.

The reason the top-dressed land gave way to the fly, as mentioned above, was, that there was no rain to bring up the wheat and give it a good start in the fall. Poor land cannot resist the fly, and must yield the best part of the crop for *its* portion.

While wheat of every variety, *delights* (if I may so speak) in reasonably dry weather and soils, no kind will live through an *ordinary* winter, it matters not how strong the land may be, where it is subject to much water. Low, wet land, if put in wheat at all, should be *bedded* above the water.

For the Southern Planter.

Recipe to make a Light Bread Pudding.—Slice the bread, and butter it, politically, (*on both sides,*) and lay it in an earthen baker, or whatever is used for that purpose. Let a little mace and some raisins or sweatmeats be sprinkled between the slices. Then make a custard of eggs, sugar and milk and pour it over the light bread. After it has stood till the bread is saturated with the custard, bake slowly in an oven for ten or fifteen minutes, and if it is not good eating I will surrender my judgment. There should be more than enough custard to cover the bread, and it should not be baked till the custard is hard.

A Lover of Puddings.

Nottoway, 1843.

For the Southern Planter.

Mr. Editor,—I have paid some attention to the cultivation of the grasses for several years, and have found them highly beneficial in the improvement of the soil, and the assistance which they afford in raising cattle, &c. For instance, for two winters my sheep have subsisted entirely in my fields without being fed at all. They were fed two or three times during the *past winter*, but in no instance did they eat more than a blade or two of fodder. The same may be said of my cattle. True, they were fed, and they generally eat what was given them, but it is evident the grass which they obtained when the ground was not covered with snow, contributed greatly to their support. And what, I would ask, is better for horses than nicely cured Herd's grass hay?

But my object was not to write an essay on the grasses, but to ask for information. Twelve months ago, last spring, I sowed one peck of Timothy seed on a pretty piece of flat land, having previously prepared it nicely, and sowed it in oats. When I went to cut it this summer it was with difficulty I could distinguish the Timothy from the weeds and other grass. I however had the heads cut off with a scythe, and from them obtained several bushels of nice seed.

Now, sir, will you, or some of your grass-growing correspondents, give me a little information relative to this grass? 1st. As to the land best adapted to its growth. 2d. The time and manner of sowing. 3d. The quantity of seed per acre. 4th. The method of cutting and curing; and lastly, as to its merits compared with other grasses. In short, any information relative to it will be acceptable to me, and perhaps to others of your constant readers. I would here take occasion to remark, that I have, for several years, adopted the plan of mixing Herd's grass seed with my oats, previous to sowing, and where they were merely raked in, they came up beautifully. This I think a good plan when seed are scarce, and it is desired to get the grass generally scattered over the plantation, and not designed for cutting.

Yours truly, P. B. W.

Nottoway, September, 1843.

THE RED MAY.

A gentleman of this city attracted by the reputation of the "Red May," addressed some enquiries concerning its merits, to one of the most enlightened and experienced farmers in the county of Goochland; these enquiries drew

forth the following response, which we have been kindly allowed to transpose to the columns of the Planter:

Sir,—Your letter of the 8th inst., has just been received, in consequence of having been directed to Dover Mills, instead of Beaverdam, which is my Post Office. It would have given me great pleasure to have furnished you with the Red May Wheat for seed, but am sorry to say I had exchanged what had been retained for the Blue Stem or Turkey Wheat. In relation to the character of the wheat, my experience teaches me, that on tobacco or other highly improved lots, where other wheats are liable to fall and rust, it will produce more than any other variety; but on ordinary lands it will not yield half a crop. For example, a lot here which had been cultivated for a series of years in root crops, and annually manured, produced at the rate of 47 bushels and three pecks to the acre, while the average of the crop did not exceed seven bushels per acre. The Blue Stem on the same field has ranged from 10 to 15 bushels, averaging about twelve to the acre. And this I think will be found to be a fair comparative estimate of the two wheats for a term of years.

Goochland, Sept. 13, 1843. ***

Remedy for sore Teats and inflamed Udders.—White lead and sweet oil are excellent for cracked or sore teats of milch cows.

Flax seed oil, well rubbed on the udder when inflamed and cracked, will allay inflammation and soften the hardness of the bag. Rub well twice a day until the inflammation subsides.

With much respect,

E. Carpenter.

American Agriculturist.

The following is an extract from a letter received from Dr. A. C. Morton, of Mecklenburg. We are happy to find that our own opinions are in accordance with those of the Committee of the Hole and Corner Club of Mecklenburg:

You seem to have misapprehended the object of the Committee on Dr. Venable's farm.—There is not a word in the report condemning the cultivation of the grasses, or the grazing system, or any improvements made by the Doctor; on the contrary, they express their admiration of them. They however leave it for the Doctor and the Club to determine the question of the value of the improvements, and have treated the subject in a way calculated to lead to discussion and investigation. Agricultural improvement and the cultivation of the artificial grasses, may be said to be in their infancy in this region, and the Committee thought that more good would result to the community from the discussion of these questions than from their mere *say so.* The views of one of the Committee might have been inferred from the article alluded to in the first part of this communication. A resolution transmitted to you, however, by order of the Club, at its last meeting, renders it needless that I should say more, either in explanation of the views of the Committee, or the practice of our Club. I will remark in conclusion, in the words of Investigator, "as my object is improvement, I hope I shall give no offence."

Very respectfully, A. C. Morton.

Blue Stone, Mecklenkburg, Sept. 25, 1743.

From the Southwestern Farmer.

ON FEEDING HORSES.

We find in the Farmers' Magazine, London, a most excellent article on this subject, by G. Jones, of Manchester, England.

Mr. J. had been the keeper of one horse for years, and was in the custom of feeding hay, oats, beans and bran; but having heard there was a great saving by the use of the cutting box, he was induced to buy one, costing some twenty dollars, for one horse too. As he purchased by weight and fed by weight, he was able to ascertain, to a penny, his gain or loss.—We will now hear him. "The first week I gave the cut hay to the horse, he did not seem to like it, but on the second week he appeared to relish it very well, (I mention this, that parties who may wish to try the same plan may not be disheartened, if the horse should not take to cut hay all at once;) and at the months end I found that I had three trusses, or one and a half cwt. hay left." But not satisfied with so much difference, he tried the second month, and found six trusses left. Not yet satisfied, although the second purchase was kept entirely separate, and all hay not eaten carefully laid aside, he tried the same plan for the third month, and found "nine trusses and about one half" left, effecting a saving "in three months for one horse," of £1 2s 6d, (about $5 44.) He says after adopting this plan "for two years and one week, he had saved the cost of the machine £5 5s, and £4 besides," ($17 36.)

He asks if he saves this much "per month in the keep of one horse alone, is it not clear that all farmers, &c., that keep more horses must be considerably savers by cutting their hay?"

We have been cutting fodder, shucks, oats, millet and hay on one of Eastman's patent straw cutters, fourteen inch, price $45, bought of Robert Sinclair, jr. & Co., Baltimore, some twenty-six or thirty months; and although we had fed a large stock, yet we can show oats and fodder, &c., of the crop of '41 and '42, not being yet able to get to the bottom of our barn, whereas,

in former years, we were hardly able to make both ends meet, and often a bad meet it was, having to splice in with a woods grazing. Our horses, mules and colts have not, in three years, been turned in the woods one day; are fed as regular now, as if performing their daily labor. We cut up and fill our horse troughs, and not small ones either, every night through the year; what is left at noon, we remove to our cattle trough. In the winter we cut up food as for horses, and fill the latter every night, 50 feet long, two feet wide at bottom, with twelve inch plank flaring out at top. We are now using shucks, a part of them are from the corn of '41 crop, for bedding for our horses, and litter for cow lot, intending to make manure. Will this, our experience, as well as the more accurate "cyphering" detail of Mr. Jones, induce any one of our friends who even use three or four horses, to try cutting up their provender? We are decidedly of the opinion, that 30 or 40 dollars will pay a handsomer interest to the farmer if laid out in a good straw cutter, than in almost any thing else.

Some of our farmers are so exceedingly incredulous, that we have, at times, despaired of being able to make any thing out of them; but we will still try, they are worthy all our labor and trouble.

For the Southern Planter.

GRASS—A CALL ON DR. VENABLE.

The advantages, Mr. Editor, of the cultivation of the grasses is no longer a subject of doubtful propriety or expediency. Whether as food for stock, or as an improver to lands, it is of incalculable benefit to Virginia. The most judicious mode of cultivation, and the best method of making a meadow, are subjects on which we need information.

Dr. Paul C. Venable, of Wheatland, (Mecklenburg,) is one of the most successful cultivators of the grasses in southern Virginia, and the manifest improved condition of his farm within the last ten years, attests the value of the grasses as improvers. I ask you, Mr. Editor, to unite with me in asking the Doctor to give his brother planters the benefit of his experience, by a series of essays (short, sensible and practical, as I know he can make them,) on the "*Cultivation of the Grasses*," noticing more particularly the following branches of the subject:—the various grasses suitable to the Virginia farmer, the relative value, nature and mode of cultivation of each; meadows—the proper time of sowing the seed—preparing the land—quantity of seed per acre—cutting and curing hay—general management of meadow lands—the advantages and best manner of *irrigating* meadow lands, and so forth, which, &c., the lawyers say "comprehendeth much."

The Doctor is patriotic enough not to shrink from so great a task. He can write, and this advantage, with his *experience*, will enable him to confer a benefit on the community.

Amelia, Aug. 2nd, 1843. JUNIOR.

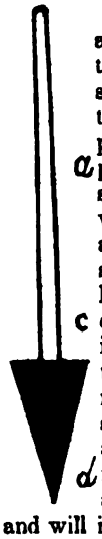
P. S. It is highly probable that other farmers than Dr. V., will unite with him in giving the public the benefit of their lights, on the interesting subject of enquiry above referred to. Don't let them, Mr. Editor, hide their light under a bushel.

EGGS AS A REMEDY.

The white of an egg is said to be a specific for fish bones, sticking in the throat. It is to be swallowed raw, and will carry down a bone very easily and certainly. There is another fact touching eggs which will do very well to remember. When, as sometimes by accident, corrosive sublimate is swallowed, the white of one or two eggs, taken immediately, will neutralize the poison, and change the effect to that of a dose of calomel.

For the Southern Planter.

A POST-PLANTER.



Mr. Editor,—Annexed is a figure of a very useful instrument in making the holes for the "stob," (there is no such word, I believe, in Johnson, but the reader knows what I mean) of a post-and-rail-and-rider-fence. Take a piece of round iron, say four or five or six feet long, (an old gig axle tree is very good for the purpose,) about one and a half inches in diameter, represented by the rod *a*, at the shoulder *c*, let the rod be enlarged having a conical shape, decreasing in size to *d*, being at *c*, say four inches in diameter: the cone being the part from *c* to *d* makes the hole to plant the post. A strong man, by raising the planter, and thrusting it with all his strength in the ground once or twice, will make a good hole in the ground for the post, and will in the same space of time, make three times the number of holes for posts, than with the old dogwood cone, or wedge and maul or mallet.

Cumberland, 3d, 8mo. E. G. N.

Extract of a leter from Georgia.

USE OF STRAW AND LEAVES.

When I was here last year, I wrote you that Mr. Camack, of Athens, covered his corn fields with a body of leaves, so as to protect the ground from the effects of drought, and to save the trouble of ploughing and hoeing. I also spoke of

a field treated in this way by Mr. McKinley, which was fresh and vigorous in the drought, that had shrivelled up the field along side, on land every way equal, treated in the usual way by Mr. Phinizy, who is a good planter. I have just learned the result of the harvest, which is truly gratifying. Mr. McK. made 22 bushels to the acre, when Mr. P. scarcely made two bushels. These are facts of much interest.—May not the rye straw be profitably employed in this way by the farmers of New England, and rotted on the ground as well as in the barn yards, nay more so, when the labor of ploughing and hoeing the corn is taken into the account?—*Genn. Farmer.*

For the Southern Planter.

THE AGRICULTURAL YEAR.

Mr. Editor,—The inclemency of the season, and other manifest reasons, makes the first of January a very inconvenient period for the farmer to begin his year. And as in other professions, (as for instance, among merchants, the mercantile year usually commencing in September,) convenience is consulted, there can be no good reason why another period than January should not be the beginning of the farmer's year. There is no week in the fifty two more inconvenient for moving and settling overseers, hireing hands, commencing farming operations, than christmas week. And that master would greatly benefit the condition and add to the comfort of his servants who would refuse them the usual indulgence of a holyday at christmas.—Far better that they should be at work than engaged in dissipation and vice, or even in the comparatively innocent pleasure of visiting.—Virginia planters would thus save in Doctors bills enough to supply themselves with every agricultural paper in the union. *The first day of November of each year*, would be a very good period for commencing the agricultural year.—By that time we have gathered in the crops, and are commencing preparations for a new crop. This would be a more suitable and convenient time for changing overseers, hiring hands for a succeeding crop: and the health and comfort of our negroes would be promoted by giving the annual holyday in the last week of October. S. S. V.

Scottsburg, 5th August.

NEW MODE OF MAKING SOAP.

The Westminster Carroltonian mentions the manufacture of a barrel of soap by Mrs Moul, of that town, without the aid of fire. The whole process of change from ley to soap is effected by the heat of the sun, without any trouble. It must be regarded as an economical improvement on the old process.

We know of an economical housewife in this city who has been in the habit for many years of manufacturing, in the manner above indicated, all the *soft* soap she required for household purposes. The process is exceedingly simple, it being only necessary to use an old barrel as a ley hopper, and draw off every now and then a bucket of ley, which is poured upon the grease, that should be placed in another barrel, and set in a position where it is exposed to the rays of the sun, but to be covered over in rainy weather. In this manner, with the aid of occasional stirring, the soap will be fit for use in a few weeks. One barrel of ashes and four pounds of rendered fat, will make a barrel of soap. It is not necessary, however, to rend up the fat, as it may be thrown into the barrel in any state, and will be consumed by the ley.

Nat. Intelligencer.

CONTENTS OF NO. X.

Improvement of Old Lands—An account of Dr. Palmer's system, p. 217.
Lime, Salt and Ashes—Effect of the mixture on soils, p. 217.
Mecklenburg Hole and Corner Club—Communication from, p. 218.
Indian Corn—Room for improvement in the crop of Virginia and North Carolina, p. 219.
Fall Ploughing—Objected to, p. 219.
Sand Hill Hog—The breed described, and illustrated with a cut, p. 220.
Goochland Fair—To take place in November next, p. 221.
Gapes—The cause and the remedy, p. 221.
Crab Grass—Its value as a crop, p. 222.
Capital—Its proper disposition in agriculture, p. 222.
Horse Power—Hall's patent horse power described, with a cut, p. 224.
Beehives—A plan recommended, p. 225.
A Looking Glass—In which many of our farmers may see their faces, p. 225.
Agriculture—The true state of the science, p. 227.
Seed Corn—Directions for saving, p. 228.
Mecklenburg Hole and Corner Club—Their report on Mr. Leigh's farm, p. 228.
Milk—A cellar the proper place for the dairy, p. 229.
Industry—The difference between saying *go* and *come*, p. 230.
Old Field Pines—Should be converted into coal for curing tobacco, p. 230.
Soils—Apparatus for testing texture of, p. 233.
Butter—In the Richmond market, p. 233.
Hens—To select eggs, p. 234.
Overseers—Their wages, p. 234.
Aphorisms—No. 6, p. 235.
Wheat—Red May, p. 236.
Pudding—Recipe, p. 237.
Grasses—Inquiries, p. 237.
Red May—The merits of, p. 237.
Sore Teats—Remedy for, p. 238.
Feeding—Directions for feeding horses, p. 238.
Dr. A. C. Morton—Letter from, p. 238.
Grass—A call on Dr. Venable, p. 239.
Choking—To relieve, p. 239.
Fence—Apparatus for preparing stake holes, p. 239.
Covering—Use of straw and leaves, p. 239.
Agricultural Year—To commence in November, p. 240.
Soap—New mode of making, p. 240.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.* | Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS, Editor.

VOL. III. RICHMOND, NOVEMBER, 1843. No. 11.

SEEDING WHEAT.

Shall we ever get things straight in agriculture! Whilst in our last number we were urging upon our readers the consideration of thicker seeding, and that upon the authority of a celebrated Englis farmer, another English farmer, backed by a still more celebrated English chemist, is urging upon the people of England the advantage of reducing the quantity of seed.—No people in the world ought to have more experience in the management of the wheat crop than the farmers of Virginia. What do they say of these opinions of Messrs. Davis and Johnson? We condense the extract from one of our exchange papers:

"As in the following paper I shall propose to the cultivators of my country a very considerable reduction in the proportion of seed which they usually employ, it may be well to premise that this recommendation does not emanate from a mere theoretical agriculturist, farming only in his closet and over his books, or from one who follows agriculture merely as an amusing occupation; but on the contrary, that I am largely engaged as a practical farmer of between seven and eight hundred acres of highly-rented land; and, moreover, that whatever I am about to recommend, I have not only long and successfully practised, but that I have ever been willing, and am still farther ready to prove these assertions, by showing the crops I in this way produce.—And I think that any practical farmer, who witnesses these will readily allow that by the adoption of the system of thin sowing I grow large crops on soils of a very inferior description.

The importance of the inquiry, even in a national point of view, no one will dispute who is made acquainted with the fact, that if my practice of seed saving were general, that the proportion saved would amount to much more than the annual average of the quantity of foreign corn imported into this country during the last fourteen years.

The consideration of the extraordinary fact that whilst a single grain of wheat, planted where it has room to tiller out, will produce four hundred-fold, and often much more, and yet that the farmers of England, on an average, only receive back about eight times the seed they sow, first led me to gradually reduce my proportion of seed wheat from three bushels per acre down to about three pecks, which reduction I have accomplished to the evident improvement of my growth of corn. And I have at this time (May, 1843,) the finest promise of a crop from this latter quantity, and this, too, after one ploughing of pea and bean stubbles, and upon soils low in the scale of natural fertility, and without any manure having been for some years applied.*

Having, from this brief detail of my practice, shown the success of an extended system of thin sowing, the reader will readily, upon reflection, perceive the explanation of the advantages which I thus derive—*why*, it is that three pecks of seed wheat per acre must be much nearer the correct quantity than ten pecks.

It is evident that if one grain of wheat, when sown singly, produces four hundred grains, and that one bushel of wheat sown only yields eight bushels (that is, only eight for one, instead of four hundred for one,) that ninety-eight grains of seed wheat are by the ordinary method thrown away.

Again, the produce of an ear of thick-sown wheat yields about forty grains, (I say thick-sown, for thin yields much more,) and therefore the produce of an acre (or twenty bushels the ordinary average,) is in reality the growth of the ears from two pecks only (that, too, is allowing only one ear from each grain). This eing the fact, of what use, I ask, or what becomes of the remaining eight pecks of seed which are commonly sown?

There are, in truth, many disadvantages attendant upon thick-sowing. In the early stages of the young plants' growth, when the air and the soil are moist, and the plants small, each vegetating seed, no matter how much seed has been sown, finds sufficient space and food for its support. But as the plants increase in size, a struggle for nourishment commences, which increases in severity, and finally terminates in the destruction of the weaker by the stronger plants, but not until after a contest, which leaves the survivers stinted in their growth, and perhaps diseased.†

* The soils of Mr. Davis' farms vary very considerably, including stiff clays, sands, poor gravels, and shallow loams resting upon chalk.—C. W. J.

† And when the struggle is over, the injury has not

That this struggle must take place, is shown by my calculation of the number of straws that can rise into ear, compared with the grains sown. And that this struggle does take place, is very plainly betrayed by the yellow, sickly color of thick-sown corn in the spring, when all other vegetation puts on its greenest tints.

In the early stages, however, of its growth, the appearance of thick-sown corn is much superior to that of the thin-sown. For a *season* its progress is more rapid, the stems rise sooner, the ground appears covered much earlier. This state of things usually continues until about the end of April. But then a change comes over the field—its dark green tints, which shaded it in early spring, change to a yellow, sickly color, and its progress is sensibly arrested. In the meantime, the thin-sown retains its color, feels the benign influences of spring, tillers out in all directions; and its progress towards harvest is uniformly vigorous, and superior to the thick-sown. It is stouter and more uniform in the height of its straws, and the size of its ears.—It is more free from blight, and the weight of the crop is greater.

Nature herself betrays the evils of thick plantations of every description, in dwindling plants, and in the sickly appearance of the crops of all kinds, and the planter and the gardener is ever ready to take warning by the lessons she thus affords. The planter well knows the effect of an over-crowded plantation; the gardener by the full use of his hoe is careful to give ample room to each plant; it is only the farmer who, guided by his eye alone, is pleased in the early stages of his thick-sown crops to see his ground well covered with plants of young corn, without stopping to reason upon the power of the soil to bring them to maturity.*

For the Southern Planter.

POUDRETTE.

Mr. Editor,—In your last number of the Planter you have requested information of the results of experiments tried with poudrette.—You will probably recollect, having furnished me with two barrels of the article, with which I experimented as follows: Upon English peas, contrasted with hen-coop manure; upon potatoes, contrasted with stable manure; upon onions in *union* with hen-coop manure, and in contrast with it; upon grape vines; and upon corn in contrast with the soil; and upon early York cabbage. In every case its superiority was manifest, except upon the cabbage; the peas were decidedly superior. The *vines* of the potato, (which I have not yet taken up) were full two-thirds better than the others. The onions were as fine as they could well be—but I could not ascertain with accuracy the difference. Its effects upon the grape vines was astonishing, and has apparently completely restored them to health and vigor. But its most perceptible superiority was upon the *corn*, the difference being fully as *three* to *one*. Why it did not appear to benefit the cabbage, I cannot conjecture. If I may take the liberty of expressing an opinion, I should say that I consider it the most valuable manure I have ever used; but I am not as yet prepared to say whether its superiority will justify the difference in price between it and other good manures. I am rather inclined to think it will not; but this opinion is not based upon a thorough knowledge of its virtues, which (it must be admitted) are very great. I purpose trying other experiments with it, and I hope to settle that point, at least, to my own satisfaction. You shall know the result. Whilst upon the subject of manure, may I ask you whether you do not think an individual, fully competent to the task, might not do a good business by going around and analyzing the soil upon different farms? or has agricultural chemistry yet sufficiently diffused itself among the farmers to render them sufficiently alive to its importance?—For myself, I should be much gratified to have an accurate analysis of my land, and would be willing to pay a fair compensation for it.

Respectfully,

JOHN B. GARLAND.

Fredericksburg, Sept. 25, 1843.

We are much obliged to Dr. Garland for his report upon Poudrette, and should be pleased to learn whether his results have been verified by the experiments of others.

SUGGESTION TO FARMERS.

An agriculturist should never overlook these two laws of nature: first, that which keeps the earth covered with vegetable production, and which is necessary for the continuance of vegetable growth; second, that for the continuance of its kind. All organic productions, being possessed of a set of generant organs for re-producing their kind, cannot be disturbed, when these functions are developed for procreation, without injurious results.

To enrich our lands, they should never be left without a covering to protect them from the sun of summer, and as far as our abilities extend, from the severe frosts of winter. To insure a good crop of wheat, and at the same time

ceased, for instead of a vigorous and unimpaired plant, the vegetation of the survivers is languid and inferior even to the time of harvest.

* I shall be very happy to show any agriculturist, as I have already done to Sir Charles Burrel, Bart., J. A. Smith, Esq., and other eminent agriculturists, my farming, at Oaks, at Shirley, near Croyden, or at the Selsden Farm, the property of Mr. G. R. Smith, also near Croyden.

improve the soil, two green crops should be turned under during summer, with the use of salt. In the slow decomposition of vegetable matter, I have found an animal production, that has been supposed to be harmless; but I have had reason to believe otherwise, and find that common salt is a good corrective. Under the supposition that the land does not want lime, two green crops ploughed under during summer, will in a great degree protect the earth from the influence of the direct rays of the sun, and the crop receive the exhalations from the soil to be returned to it, and with the use of salt, will produce a better crop of wheat than manure from twice their quantity, after undergoing decomposition in the stomach of cattle, and be a more permanent improvement of the land.

To retain the gaseous matter in the soil, nature keeps it closely covered, and by this covering, each plant receives a continuance and equinecessary quantity; while if the putrifying vegetable substance was exposed to the direct influence of the sun's rays, it would be thrown off into the atmosphere in vapor, as I presume all excess of gaseous effluvium is, for the common benefit of nature's grand design; and, with the use of lime and plaster, those gases which appear necessary can be retained.

The greatest error appears to be committed in our corn crops and peach orchards; and this is for want of the proper application of the two laws of nature that head this article, and I believe that thousands of days labor are expended in violation of these laws that are worse than useless. I know from the results of my own farm, that from the ground (under common culture, by a good and attentive farmer) that produced about 400 bushels of corn, planted four feet square, I have taken nearly 900 bushels, with less labor, (except the husking,) when planted and worked consistently with the above laws; and this is not the only instance, but in every crop I have ever planted of this kind.—Plant this and all other hoed crops close enough to prevent spontaneous growth at the time when the vessels for forming seed are maturing, so as not to be under the necessity of working them at this time.

LYTTLETON PHYSICK.

Arrarat Farm, Cecil Co., Md., May 12, 1842.

Albany Cultivator.

For the Southern Planter.

HORSES.

Mr. Editor,—The ordinary means of purging a sick horse are so slow in operating, that, in many cases, they do no good. I send you a very simple *recipe* with which some of your readers may not be acquainted; which I have never known to fail; and, regard as the best and simplest. I saw it many years ago in the American Farmer, and have tested it.

"Take a piece of chalk about the size of a walnut, pound it in a mortar, or wrap a rag around it and reduce it to powder with a hammer or any thing else—put the powder into a quart bottle—pour common vinegar into the bottle until the effervescence prevents your pouring more, and (having the horse ready) drench him with it. But little vinegar can be gotten into the bottle the first time, so that you will have to pour more into it, and drench a second time. Ordinarily a pint will do. In cases where it does not operate in *five* or *ten* minutes, persevere in the dose, and in a very short time the suffering animal will be well again."

I concur in the opinion that every farmer who wishes to benefit others should not be ashamed to back his recommendation by his *name*. If *he* be ashamed of it, who ought to confide in it?

Yery respectfully yours,

C. W. GOOCH.

Airfield, June 2, 1843.

AGRICULTURAL FAIR IN ORANGE.

We regret that we did not receive in time for our last number the notice of the annual Fair of the Union Agricultural Society to be held at Orange Court House on the first Thursday in November. We rejoice in every announcement that brings together the farmers of the country to discuss and consider the subject of their calling.

CLOUTED CREAM.

This delicate luxury seems not to be duly appreciated in this "land flowing with milk and honey." Among farmers, where we might expect to meet with it in abundance, we rarely find it. The economy of it would form an important item in a large or a common sized dairy, as it is said in England, where it is much used, to yield one-fifth more and better butter than when not clouted; for this fact however our experience will not enable us to vouch. But we can believe that the unpleasant flavor which milk sometimes has will be expelled. The process of clouting is simply to scald the milk over a slow fire, until it rises to, or near the boiling point. This detaches all the cream from the milk, on the top of which it forms a compact sheet, which may be cut like cheese curd. Put into coffee or on fruits, it constitutes a rich and delicious appendage. The mode of making it, in England, is to put the milk into a bell metal vessel, and let it stand twenty-four hours, or while the cream rises. Then hang the vessel over a moderate fire, where it is continued about

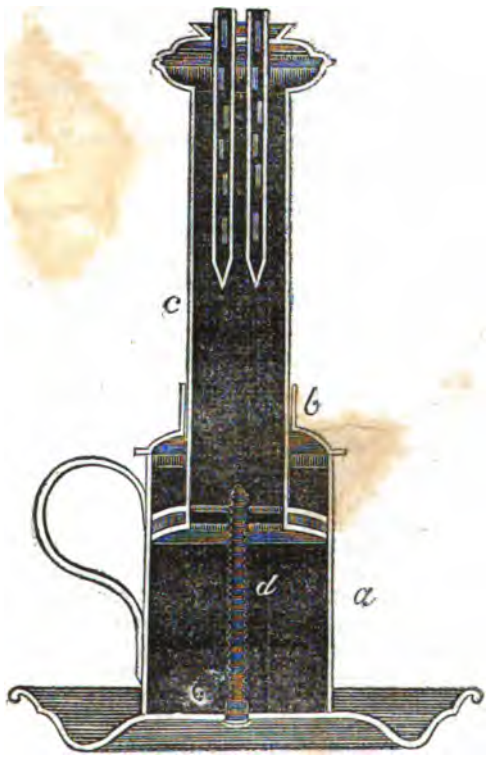
an hour and a half. When near ebullition, the vessel is occasionally rapped by the nuckle to ascertain whether it rings, for at the boiling point, the vessel ceases to ring, and is immediately taken off and set away to cool. As the sudden dumb fit in the vessel is to us a new fact in philosophy, we can only hazard the conjecture, that it results from the rapid rarification of the atmosphere in contact with the metal.

Whoever has clouted cream in his coffee, or his butter, will be sure to be pleased with the improvement, aye, and the economy too. Scalded milk, without cream is nearly equal in coffee to cream without scalding.

Be assured, reader, that clouted cream, gives a most cooling and pleasant relish to a well manufactured cup of coffee in the morning, that greatly allays thirst till the next meal.

Farmers' Gazette.

LARD LAMP.



It has been now about two years since the idea of elevating lard from the kitchen to the parlor originated in the brain of some enterprising Yankee. When we were at the North last fall, we heard a great deal about lard lamps, and being somewhat curious about all new projects, we bestowed some pains on the investigation of the subject. We were soon satisfied that the softness of the light and the economy of the material would recommend it to general use, if any contrivance could be found to keep the lard at all times in a liquid state. To effect this object we found patents had been taken out for forty-odd kinds of lamps. We tried a great many and found them, generally speaking, total failures: at last, we fell upon one that seemed to answer the purpose very admirably, and we supplied ourselves very liberally with lamps after that particular fashion. From that day to this we have burned nothing but lard on our premises, and every hour have had reason to be more and more pleased with our purchase. But Mr. Jesse Neale, of Ohio, presented to our notice a few days since a lamp, (the one repre-

sented in the engraving) which, from the nature of its construction and a fair trial of its operation, we unhesitatingly pronounce far superior to any thing of the kind that has come under our observation. We will endeavor to describe it. This is a sectional view of the lamp, (*a*), the body of the lamp, is a hollow cylinder, in which the lard is placed; the top (*b*), which fits on the cylinder (*a*), and is removable at pleasure, has a hole in the centre through which the tube (*c*) can move up and down. To the lower end of this tube is fitted a piston or follower, which works tight in the large cylinder: in the centre of this piston, is placed a nut, which works upon the screw (*d*). Now when the top is removed, and the piston unscrewed and withdrawn, the lard is placed in the large cylinder; the piston is then replaced, and the tube being turned round, of course the nut descends upon the screw; this carries the piston or follower with it; the lard which is thus compressed, has no means of escape except through openings that are cut in the bottom of the piston and lead directly into the upper tube. By this means a lard candle is moulded, about the wicks, which are placed in the two small perforated tubes at the top of the lamp. The reservoir at the top is kept in a liquefied state by the heat of the flame and when it is exhausted one or two turns of the screw will replenish it.

In one of these lamps we placed ten ounces of common lard, and it afforded us a light fully equal to that of two spermaceti candles, for twenty-two hours. The peculiar softness and beauty of the light must recommend it to all those who suffer from weak eyes, or want to take care of strong ones. Not only is it superior to the oil lamp in economy and beauty, but it is infinitely cleaner and neater. A small portion only of the lard being liquefied at a time, an *upset* does not result in the puddle of grease, the hurrying after cloths, and the gentle exclamations of the good wife, that sometimes flow from the overturning of the oil lamp.

It is said that in this lamp may be burned the refuse grease of the house; this we know, that lard totally unfit for cooking, which may be procured for a very small price in the market, will burn excellently well. In short, we do not hesitate to venture the prediction, that when the merits of this lamp are fully understood, the farmer's bill with the grocer for oil and candles, is closed forever.

For the Southern Planter.

ORANGE AGRICULTURAL CLUB.

Mr. Charles T. Botts:

Dear Sir,—I am directed by the Orange Agricultural Club, to forwaid you for publication in the Planter, the following Report, and also the Inspection Report on Club Farm, No. 4, addressed to you on another sheet.

By a regulation of our Club, beside the general examination, made by every member, of the farm at which the Club meets, an Inspecting Committee is also appointed, to report specially, on its condition, management, &c. to the next meeting. Committees are also appointed on various other subjects interesting to the farmer, and individual members selected to prepare and read to the Club, essays on agricultural subjects of their own selection.

Yours, James Newman.

Orange County, Oct. 11, 1843.

—

POUDRETTE.

The Committee, to whom was referred the duty of testing the efficacy of some highly concentrated manure, on corn and other plants, submit the following, as the result of their experiments:

With a view to comply with the requisitions of the Club, we each procured from Mr. Chas. T. Botts, of the Planter, a barrel of poudrette at $2 50 per barrel. From the high recommendation given, and extraordinary virtues attributed to this material, we anticipated the most satisfactory results, and entered upon our experiments strongly predisposed in favor of its success. There was nothing in the appearance of the article obtained by us that indicated its true character, but the fragments of broken bottles, glass, earthenware, &c. &c. found in it.

It was applied, in the month of April, to wheat, at the rate of twenty bushels to the acre; to oats, when sowed, and harrowed in with them, at the rate of twenty-five bushels per acre; to early peas very heavily when sowed, and just before they bloomed; to cabbage plants in the bed and sometime after they had been transplanted; to beets, potatoes and vines, very heavily; to corn when planted and at several stages of its growth, at the rate of a gill to the single stalk; and to tobacco, in June and July, at the same rate to the hill; and in no instance could the slightest benefit be observed.

Believing, notwithstanding, in the value of poudrette, when genuine, we are forced to the conclusion, that in this instance Mr. Botts was made the unconscious instrument of imposing upon us a spurious article; and we hope that in future he will adopt some means by which similar frauds may be detected, and thus pre-

vent the use of the genuine article, (if as valuable as represented,) from being discouraged.

JAMES NEWMAN.
EDMUND HENSHAW.
JAS. NEWMAN, *Cor. Sec'y.*

The only means we can employ to prevent such deceptions as are here complained of, is to afford every facility for their exposure. We never saw the inside of a barrel of poudrette, but sold it precisely as we received it from the manufacturer in New York. In justice, however, to Mr. Minor, the Agent of the Company, it is proper to state that the article here so unequivocally condemned was a part of the same lot with that so highly lauded by Dr. Garland in another part of this number. There can, however, be no mistake about the article tried by this committee: it is utterly impossible that *genuine* poudrette should be inoperative. It may be that a real and a spurious article have been sent us, and from contradictory reports that have been made from different quarters, we are inclined to suspect this has been the case. At any rate, a due regard for his reputation requires that Mr. Minor should investigate and explain this matter. No denunciations are too severe for the scoundrel who, for the petty sum that he would make by the fraud, would knowingly betray the confidence reposed in him, and impose on the farmer a spurious article whose worthlessness could be detected only when the season for improving his crop was passed.

With these contradictory statements before us we should be pleased to hear what has been the experience of others with respect to this article of poudrette.

FARM REPORT.

The Committee appointed at a meeting of the Club, held on the third Saturday in July, to examine Club Farm, No. 4, (that of Jas. Newman, Esq.) have performed that duty and submit the following report:

This farm consists wholly of Southwestern mountain land, the soil being generally a vegetable loam of various depths, reposing on a basis of red clay. When it came into the possession of its present proprietor, it had been greatly injured by bad tillage and an exhausting system of cultivation. The system introduced by him, however, has developed its great capabilities, and it is indebted for its present improved aspect, both to its susceptibility of improvement and to the judicious husbandry of its owner.

It was purchased some fifteen years ago at eight dollars per acre—a price, deemed at that time sufficiently high, owing to its ruinous and exhausted condition. The four-shift rotation was first adopted, as less than one-fouth of the arable land was insufficient to produce the necessary quantity of corn for a small family.—But, by the free use of clover and plaster with partial grazing, by indefatigable industry in making and applying manures, and a judicious system of management generally, the fields are now clothed with heavy and luxuriant crops of clover and other grasses, the gullies and galls nearly healed, the thickets cleared up, and the farm well ditched. Thus, in the short space of fifteen years, this farm has not only been made to produce abundant crops of corn and wheat, (some of the fallow fields yielding of the latter from twenty to twenty-five bushels per acre,) but the culture of tobacco is now introduced with profit on improved land, and, in the opinion of your Committee, the value of the estate is trebled.

The rotation of crops now pursued is that of six-shifts:—First, corn; second, wheat; third and fourth, clover; fifth, wheat; and sixth, clover. There are about six hundred acres of arable land, besides two well located permanent pastures, consisting mostly of a northern hillside too precipitous for convenient cultivation. The laborers are eleven in number, comprising men, women and boys. There are six work horses and four yoke of oxen. The horses and cattle are not remarkable. Of the latter there are about forty. The sheep, however, are very fine. They are intermixed with the Bakewell blood, and would, perhaps, compare with any flock in the country, of whatever breed. About fifty are kept, mostly ewes, which yield an average of upwards of four pounds of clean wool. The ewes are never permitted to bear lambs until they are two years old, which, with occasional crossing and good grazing, not only causes them to yield more wool, but to attain greater size—many of them weighing from ninety to one hundred pounds nett mutton. Few of the hogs were seen. They are mostly of the Berkshire blood. Though this breed has lessened in reputation with most of us on account of its size, yet the owner of this farm highly approves of them, being satisfied that they are heavier than their appearance would indicate.

Though much of the manure had been applied to the tobacco and corn crops, and a good deal of straw, in a dry state, spread over the young clover, yet your Committee were sorry to find a larger quantity of each still lying about the farm-yards, than they would have expected from the well known industry and skill of the proprietor; though it may be said in extenuation, that, owing to the season, farming operations have been more than ordinarily retarded this year.

Your Committee object to the mode practiced

here, of capping instead of tying wheat-shocks—many of which were in bad order, from being deranged by wind or otherwise. The corn and wheat crops were not as good as might have been expected from the fertility of the land.—The tobacco was very unpromising, owing to the prevailing drought. All the clover and other seeds used, are made upon the farm.

There are two very productive meadows, which contribute both to the revenue of the estate and to the compost heaps. One of them was, a few years since, an unsightly bog, which, since its reclamation, tends to beautify the farm.

In conclusion, your Committee can bear testimony to the fact, that the farm and all its appurtenances indicate much skill and good management, worthy the imitation of all.

E. P. Barbour.
J. B. Newman.
E. Goss.

Jas. Newman, *Cor. Sec'y.*

SELECTING SEEDS.

Great improvement may be made by a judicious selection of seeds. In most all crops, some plants will be found more early, or in some respects superior to others. From such, seeds should be carefully selected.

If a cultivator desires to have any production earlier than usual, after procuring an early kind, let the first seeds that ripen, on a well grown and productive plant, be secured, and so proceed year after year, and in this way a variety will be obtained that will excel in earliness.

Every variety of vegetable may be rendered more productive, by selecting every year the seeds of the most productive and well formed plants. And this method of improvement will be found the cheapest that can be pursued, as the difference in the cost of good and poor seed is a mere trifle.

Select peas for seed that grow in long, full pods, on vines that bear abundantly, and if you would have them earlier, take those which ripen first. Choose beans in the same way. Select seed corn from stalks that bear two or more good ears, and take the largest and best formed ears. Choose from stalks that are large at the bottom, and run off to a small top, not very high.

If you would have early onions and few scullions, select for seed a few that ripen first, and have a good form. Select the handsomest turnips for seed, having just the form you would choose, if you would have fine crops for the market; and by this selection for years, you will get a variety that may be relied on.

Follow the same rule in every thing. Like produces like, is a general law of nature; the same in the vegetable and animal kingdom: there are some exceptions, but not enough to effect materially the general crop of production, and by these exceptions we may profit; for when the exceptions are an improvement, we may follow them out, and in a short time establish a new race of variety; but when the exceptions are inferior, we can reject them.

These exceptions to general rules offer great advantages, and a wide field for improvement, while the disadvantage is a mere trifle. As a spark will kindle a great fire, so from a single seed of superior excellence, large crops of this superior production may be raised, and widely disseminated for the benefit of thousands.

There is no subject of improvement so much neglected as this; it is within the means of all, and yet few give attention to it. Too many are content to plod on in the old way, and while they spend much in manure and cultivation, they neglect a much cheaper way of improvement, or to avail themselves of those made by others in this way, when at less expense they could accomplish it, and perhaps more effectually.

We selected seed from the first pumpkin that ripened, in a variety which we cultivated for several years, and last year some were ripe in two months and five days from the time of planting. Numerous instances could be cited of the above remarks, but it is so clear to every common observer, that no evidence is necessary; but it is important that they be reminded of a subject so much neglected, and with so much loss.—*Selected.*

HORSES.

We happen to have in our possession the complete works of that quaint old author, Gervaise Markham, printed nearly two hundred years ago. Mixed with an infinite deal of superstition and nonsense, which belong, perhaps, as much to the age as the individual, we occasionally meet with information and opinions upon agricultural and other subjects that would grace the best publication of the present day. The old gentleman seems to have prided himself particularly upon his skill in horsemanship, which, as it was then practised, was a very difficult and recondite art. After giving the most minute and particular instructions for the management of the horse in his different paces, as in the Corvet, the Galliard, the Caracole and the Caragolo; after giving directions for riding before a Prince and before a Lady, (curious they are in the extreme) he gives the following directions for teaching the horse the more homely but useful art of *pacing*. This very method, without alteration and without improvement, is

at this day very successfully resorted to by drovers and breeders in the western part of this State:

TO MAKE A HORSE AMBLE.

Now forasmuch as there are a world of good horses which are not easie, and a world of easie horses which are not good, you shall by these directions following, make any horse amble whatsoever:—First, then you shall understand, that practice hath made divers men believe, that divers ways they can make a horse amble, as by gagging them in the mouths, by toyling them in deep earth, by the help of shooes, by gallopping and tyring, or such like, all which are ill and imperfect; yet the truth is, there is but one certain and true way to compass it, and that is to make a strong garth web, flat and well quilted with cotton, four pasterns for the smalls of his fore-leggs, under his knees, and for the smalls of his hinder leggs somewhat below the spavins joynts: to these pasterns you shall fix strong straps of leather, with good iron buckles to make shorter or longer at pleasure, and having placed them about his fore-leggs, you shall take two several round ropes of an easie twist, made with strong loops at either end, and not above eight handfulls in length, and these the horse, standing to a true proportion, you shall fasten to the four straps of leather, to wit, one of them to his near fore-legg, and his near hinder legg, and the other to his far fore-legg, and his far hinder legg, which is called amongst horse-men trammelling; with these you shall let him walk in some inclosed piece of ground, till he can so perfectly go in the same, that when at any time you offer to chase him, you may see him amble swiftly and truly; then you shall take his back, and ride him with the same trammels, at least three or four times a day till you find that he is so perfect, that no way can be so rough and uneven as to compell him to alter his stroke or go unnimbly. This done, you may first take away one trammell, then after the other, and only wreath about under his fore-feet-locks thick and heavy great royls of hay or straw ropes; and so ride them with the same a good space after, for it will make him amble easie; then cut them away, and ride and exercise him without any thing but the ordinary help of the bridles, and there is no doubt but he will keep his pace to your full contentment and pleasure.

Now during this time of your teaching, if your horse strike not a large stroke and over-reach enough, then you shall make the trammel the straiter, but if he over-reach too much, then you shall give it more liberty: and herein you shall find, that an inch straitning, or an inch inlarging, will add or abate at least half a foot, an whole foot and direct stroke: and this much touching the teaching of any horse to amble, of what nature or quality soever he be, or how unapt or untoward soever to learn.

TEMPERING EDGE TOOLS.

The art of hardening and tempering steel, without risk, for the various purposes to which this most important of all metals is adapted, is so little understood, even by many who work in it, that I presume a short communication on the subject would be acceptable. It often happens that tools on which labor has been bestowed, are spoiled in tempering, to the disappointment of the purchaser and to the discredit of the maker. The following directions, which by experience will be found to be correct, are designed to remedy these inconveniences. Should you think a correct knowledge of this art of importance to the mechanical part of the community, you will please to give it a place.

Admitting the tool has been properly forged, without burning or injuring the steel, in order for a good temper, it should be carefully heated in a fire made with wood or charcoal, till it is of a red color, and then plunged into clean, cold water in a perpendicular direction. If the temper is to be that of an edge tool, the steel must then be made bright, by grinding or scouring with a coarse stone, and held over the fire until it is of a deep yellow or straw color. This is the proper temper of edge tools, the most difficult part of which process is, to give the steel the least possible degree of even heat, to give it the greatest possible degree of hardness and strength. If the heat is continued beyond this exact degree, the pores of the steel will be so opened as to render it brittle, with but a small degree of hardness. Should the heat be carried beyond this degree by inattention or accident, the evil will not be remedied by letting it cool down to this color before it is cooled in the water; in this case it will be necessary to hammer the tool over again, in order to settle the pores of the steel together. The greatest care should therefore be taken in hardening a tool, not to heat it too hot, as its goodness depends more on this circumstance than is apprehended. Care should also be taken that it does not remain in the fire after it has acquired a proper heat; as even without a greater degree of heat the fire will soon coat it over with a thick scale, which will prevent the water from cooling it so quickly as is necessary, to render it as hard as possible.

Many small tools, such as punches, broaches, &c., for clock and watch makers, may be tempered by the simple process of heating as above directed, and cooling them in hot water, a little below boiling heat. This temper gives small tools great strength and a proper degree of hardness. Very small drills are best heated in a candle, with a blow-pipe, and cooled in tallow. Their temper is to be taken down the same as

an edge tool. Tools for turning iron and steel receive a much greater degree of hardness by being cooled in quicksilver instead of water.—This method of hardening must be valuable to clock and watch makers, as well as to many other mechanics, who want tools as hard as possible.

The temper of a spring, after it is carefully hardened, is obtained by holding it over the fire, covered with tallow, till it blazes and burns off; the burning of the tallow should be continued for a minute or two on those springs which from their use are liable to break. Small springs, and other articles to be tempered spring temper, are more conveniently tempered in a sheet-iron pan, or case, with tallow, held over the fire until it blazes, when it is to be taken off and carefully shaken, while the tallow continues burning.

Saws and many other common tools, which require a file to sharpen them, pinions and arbors in clocks and watches, surgeons' instruments, except those designed for cutting, bayonets, sword blades, gun sticks, and various other articles, are of this temper.

Iron may be hardened by the process of what is called case-hardening. This is performed by enclosing the iron in an air-tight case, with charcoal dust and salt, and heating the same red hot for one or two hours, and cooling it in clean, cold water. The hammers and many other parts of gun locks are hardened in this manner. If the process is properly managed, iron and steel may be hardened without even altering the smooth surface of the instruments; the advantage of which is sufficient to induce the greatest attention in giving it the exact degree of heat.—*Selected.*

SCRAPS FOR THE SOUTHERN PLANTER.

BY A GOOCHLAND FARMER.

"L." in the October number of the Planter, is mistaken in his theory of the cause of gapes in chickens. *Lice* are most assuredly not the cause, as I have had demonstrated in the last two years. No doubt they aggravate the disease, but they do not cause it. I have had in my hen-houses, which from a taste for raising fowls I superintend myself, not so much as a louse either in 1842 or 1843: yet in both years, and especially in this, the gapes have been destructive to an unusual degree. The notion that the worm in the throat or lungs of the chicken, causes it to heave for breath, is a vulgar error. Many birds, perhaps all, have these worms: but no other bird but the chicken has the actual gapes.—Turkeys and Guineas have the sneezing which is a milder form of the same disease.

The cause of gapes in chickens has exercised the observation of very many people to discover it for half a century or more. When physicians succeed in discovering the cause of the hooping-cough in children, we may hope to find out that of the gapes in chickens—not before. In truth the two diseases are extremely analogous, and no doubt each proceeds from some constitutional necessity, which is inscrutable from the nature of things. Worms in the throat or crop, or lice on the feathers, are symptoms, not causes.

But while we shall always be baffled to discover the cause of this destructive epidemic or endemic, for it is one or the other, among a very valuable family of fowls, certain facts which are well established, prove that it may be partially prevented or greatly mitigated. And first, has any one seen the gapes among their negroes' chickens? I never did, although I have looked out for them, and what is more, to my knowledge, I never saw the person who had. This I take it, is a very valuable fact. 1. The negroes' hen-houses are always small. 2. They have, of course, but few hens to inhabit them. 3. They are comparatively *warm*, and the chickens, young and old, are better protected from the cold.

Some length and minuteness of experience enable me to offer the following rules to your readers with strong confidence that they are founded in philosophy:

1. Have your houses small, close and warm.
2. Restrict your hens to six or eight.
3. If you have need to raise many chickens, multiply your houses at different points, but do not multiply your fowls within any particular house.
4. Have as many trees, and as little grass and weeds as possible, around your houses.
5. In the spring and early fall months, have your hovels for young chickens, tight and impervious to wind or rain, and frequently replenished with clean, dry straw.
6. Keep the chickens in the hovels until the dews are off in the morning.
7. For the first week feed them upon bread baked dry and without salt. After that, you may give them tail-ends, (as we call it). Oats are first—rye second—wheat third—Indian corn fourth. Perhaps Indian corn small hominy would be as good and more generally convenient than any.

I annex a few other general rules; for although, Mr. Editor, to our fellow-citizens, the Carters, the Sampsons, and the Harrisons, and other distinguished farmers, this matter may look excessively small, yet unquestionably it is important to the comfort, plenty and economy of every family.

1. *Cold feet* are the *proximate*, though not the final cause, of the gapes and most of the diseases of chickens. Keep their feet warm and you will raise eleven out of twelve chickens in every brood. Our barn-door chicken is a native of Hindostan, where it is found in a wild state

to this day, and consequently our climate is too harsh for it, save in June, July, August and September. To make it flourish, you must temper the climate to its southern constitution. In an old number of the Gentleman's Magazine, a particular description is given of the method of rearing chickens for market at a great establishment, for the purpose, in London, in which a large capital was profitably invested. The eggs were hatched by artificial heat, regulated by the thermometer. As soon as thus hatched, the chickens were transferred to another apartment, the floor of which was warmed by some contrivance underneath, and kept warm by rule, night and day. In the midst of this room was stationed a large artificial hen, with feathers fastened on by paste, under which the chickens hovered whenever they were so disposed. This, as well as I remember the date, was about 1763, or eighty years ago. I know not if any such process is now used in London for rearing chickens; but I make no doubt it is, and that it can be profitably employed in the vicinity of all great cities. The daily consumption of barn-door fowls in London averages about ten thousand, or three million six hundred and fifty thousand a year: and to rear this incredible multitude, artificial means must probably be employed.

2. Turn out your stock fowls from the spring, not the fall broods. They then attain a larger growth, and of course their progeny are larger.

3. Let your fowls, if possible, range in the vicinity of a running stream.

4. Change your stock, the roosters at least, every two years—keep no hens over four years old. *White* is the hardiest color. In the Arctic regions all animals turn white when the cold sets in, which I take to be the certificate of nature herself upon this point. But no color and no breed will do long without crossing and incessant attention.

5. I put little faith in lime, save only so far as it enters into the constitution of the egg shell. I have never been able to see the least effect from it. Gravel, I believe, would be more useful. In fact, since the cholera in 1832, the country has been somewhat lime-mad, and virtues, medical, chemical and agricultural, have been ascribed to it which it is doubtful if it possesses.

I address these hints, the fruit of actual observation, to the lovers of the old Virginia dish, fried chicken, and what is better yet, a boiled pullet with carrots, in March or April. By the way, *Friars'* chicken is the right phrase: for, the monks, who knew well what was good, especially in eating, drinking, &c. invented this dish, which, from Friars' chicken, has come to be called fried chicken. P.

We knew our friend was "great" at politics and fishing, but had no idea he was so much of a *fowler*. We really esteem his communication the very best we ever saw upon the important art of rearing chickens. We know and respect our correspondent's love of ancient lore, which we think has mislead him a little upon the subject of *Friars'* chicken. If to call chicken which is fried, "fried chicken," be a corruption, it is surely the most natural and excusable error of which we have ever heard.

SWINE MANAGEMENT.

In managing hogs, it is important that pigs should be farrowed at seasons of the year neither exceedingly hot or cold. April and September are the best months for the sows to pig. For this purpose they should go to the males the last of May or first of June, and in December. It is a good rule never to let breeding sows get very poor or very fat. From the time they go to the boars till within a month of pigging they should be fed regularly, but only in sufficient quantities to improve them slowly. As the time of pigging approaches they should be fed more bountifully. But if they become too fat, they often overlay their pigs, and are not usually careful with them. Many rules have been given for the management of sows at farrowing, but only a few plain directions will be of service:—1st. Let no other hogs interfere with the sow; and 2d. Be certain she has water and a pleasant shelter in the lot. If she should happen to make choice of an unsheltered spot for her bed, a few planks, or a board shelter will protect her from the sun and rain.

Young pigs should become fat as soon as possible, and be kept so till they are ready to butcher. To effect this matter, the dams should have an abundance of rich food, such as kitchen slops, roots, boiled corn, &c.

It is a good practice to have a small pen with a hole, to admit the pigs, and a low trough for them to be fed from the time they are two weeks old.

When the pigs are from six to eight weeks old, if they have learned to eat well, they should be weaned. At this season there is greater difficulty than any other. Unless they have close attention they will become poor, sink behind the shoulders, and scarcely ever recover from it.—Let them have food regularly five times per day, and it should be such as will suit the stomach, and be most nutritious. Slops will answer a good purpose, for part of the time, but the food should vary every day. Milk, boiled meal, slops, roots, and dry food, as corn, should be given daily. Hogs should have water at all times, and if salted every day, they will do the better for it. Grass and clover, are always acceptable

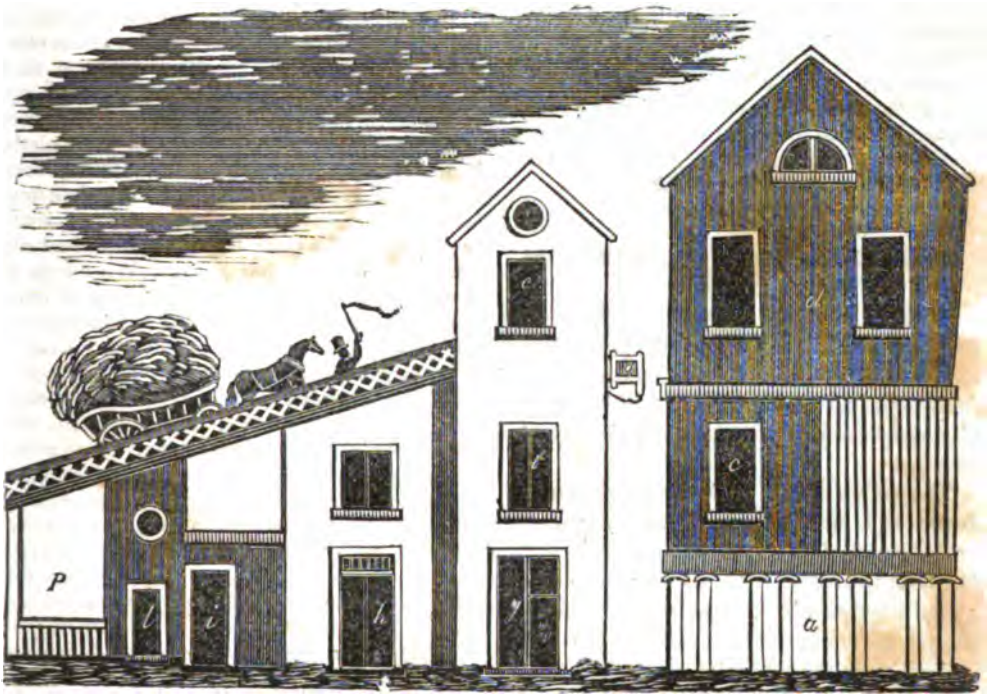
to swine, and cymlings, pumpkins, and peas are very good, and artichokes, in winter, (except when the ground is frozen) are unequalled, particularly if the hogs have salt and a little dry food daily.

Care must be taken that hogs do not occupy the same bed too long, and by all means they should be kept from sleeping in stables, about manure heaps, in shucks, or wet, or old straw.

The cheapest pork is that which is made of pigs dropped in the spring and slaughtered the December following. By this process a winter's feed is saved, and by "pushing" the pigs will weigh from one to two hundred pounds at eight or nine months old. For large pork, the year olds will do tolerably well, but we think it bad econmy to have killing hogs more than twenty months old.—*Tennessee Agriculturist.*

For the Southern Planter.

FARM BUILDINGS.



a. Posts, on which the corn crib and granary are to be placed.
e, f, g. Doors to hay house.
h. Stables.
i. Corn house.
l. Poultry house.
p. Pig stye..

Mt. Airy, Pa., Sept. 14, 1843.

C. T. Botts, Esq.

Dear Sir,—I send you a drawing of farm buildings *to save labor.* On every good farm, buildings must be provided to preserve the crops. They may as well be congregated and form a bridge to enter them in an upper region, and save the labor of pitching or hoisting up the produce. Carts can be constructed to tip up and deliver their loads either of hay or grain in the straw, or corn on the cob. The granary and corn crib should stand on legs, with tin bells around them to prevent vermin from ascending. Pivot bridges might be constructed perfectly safe from accident, to communicate between the different buildings. All buildings should be made as high as it will be safe to make them, on the score of economy, as the roof and foundation will answer for either a high or a low building, and when they are so constructed that you can enter the tops of them with ease, the inconvenience of height will be less objectionable.

All buildings not standing on legs should have cellars under them; their lower floors should be laid first with tin plates, and the planks nailed over the tin, to prevent rats or mice from ascending or descending. The cellar floors should be laid with small stones and mortar to prevent accidents of the rat species.

Yours respectfully,

E. J. PIERCE.

From the Farmers' Gazette.

TO BRING FORWARD VEGETABLES AND FRUITS.

A capital compost liquid manure may be thus made by any gardener. Take of the weeds you rake out of your grounds, a handful; of hog manure, a spade full; dry leaves, wood ashes and lime, of each a handful—and put it at night into the tub, from whence you water your plants. With this liquid, in the morning, fill your water pots, and sprinkle liberally *over the tops as well as the roots*. The effect will soon be made apparent, in the increased vigor of your vegetation. K. P. Th.

New Haven, 15th May, 1843.

JOHNSON'S ENCYCLOPEDIA OF AGRICULTURE.

We once more call the attention of our readers to this valuable work. The publication is now complete, and we have been indebted to the liberal and enterprising publishers, Messrs. CAREY & HART, for the numbers as they were issued.

The author of this work, Mr. CUTHBERT W. JOHNSON, is esteemed one of the most practical and scientific farmers in Europe. His object has been to present, in the most accessible form, a bird's eye view of the opinions and doctrines of that galaxy of talent which has lately shed its light upon the subject of agriculture.

The English edition, which of course contained a great deal of matter that was irrelevant to our climate and institutions, has been overhauled by a gentleman of Pennsylvania, with whom we have not the happiness to be personally acquainted, but whose reputation as a man of science is hardly greater than his celebrity as a practical and successful farmer. Whilst he has subtracted much that was valueless to the American farmer, he has added to the views of Liebig, Lindley, Lowe, &c. the labors of Buel, Jackson, Dana, and a host of American authors, which has probably doubled the value of the work.

Even if the matter were less meritorious than the character of the Editor warrants us in supposing it to be, the convenient form of its arrangement would recommend it to the consideration of every farmer. Here is a work which may be had for four dollars, less than one-third the price of the English edition, where the agriculturist can turn at once to any subject upon which he may desire information, and find an epitome of all that science and observation have yet discovered. We know of no better investment that can possible be made of a half dozen turkeys.

From the American Farmer.

CHARCOAL AS A FERTILIZER.

It will be recollected by our readers, that in our last two volumes we have published several able papers upon the virtues of charcoal as a fertilizer of the soil, and of its supposed efficacy in the preservation of wheat from rust. One of these papers, by Judge Hepburn, particularly points out cases in which lands which had been dressed by charcoal had grown wheat free from rust, when wheat grown on other lands, contiguous, which had not been so treated, had suffered greatly from that cause. We allude to these circumstances now, with a view of introducing the subjoined paragraph to the notice of our readers; by which it will be seen, that in France the same virtues have been ascribed to charcoal as in our own country. Of the precise mode of action by which this exemption from rust is produced, we are not prepared to speak positively; but will claim permission to observe, that it may be owing to the very great affinity which charcoal is known to possess for ammonia, and the reluctance with which it gives it out after having once absorbed it. If the opinion which is now gaining strength and consequence, that the cause of rust is *plethora*, and that ammonia is one of the chief aliments or food of plants, be correct, the preventive properties of the charcoal may arise, first, from its absorption of ammonia as formed, and, secondly, from its yielding it slowly to the wheat plant in the last stage of the maturing of its stem, thus, as it were, hindering it from feeding to that degree of excess productive of repletion, and the consequent disruption of the stem of the plant. At all events, as the rust is one of the most disastrous diseases in its effects, to which the *wheat crop* is subjected, we think that the use of charcoal to a *limited extent, by way of experiment*, is worthy of the consideration of every wheat grower. If it should, on trial, fail of the anticipated efficacy, it can do no possible injury either to the grain or to the soil, and may be beneficial to the latter, in supplying it with sili-

cate of potash, a substance of vast importance to all grain crops, and especially useful in giving strength and elasticity to the straw.

With these remarks we will direct attention to the following paragraph:

CHARCOAL AS A FERTILIZER.—We have been astonished at the enormous increase of the wheat crop in France within the last eight or ten years, and have devoted some attention to the investigation of the subject. It appears that charcoal—an article that can be obtained here for a tithe of its cost in France—has been extensively used, and with marked effect, in fertilizing the wheat lands in that kingdom. A correspondent of the New Farmers' Journal, an English print, states that during a sojourn in one of the central departments of France he learned that some of the most productive farms were originally very sterile; but that for a number of years their proprietors had given them a light dressing of charcoal, which had resulted in a large yield of wheat of excellent quality. Since his return to England he has tried the experiment upon his own lands with the same happy effect. The charcoal should be well pulverized, and sown like lime, after a rain or in a still, damp day. Even in England, the writer says, "the expense is a mere trifle, in comparison with the permanent improvement effected, which on grass is truly wonderful."—He states one other very important result from its liberal use. "I am quite satisfied that by using charcoal in the way described *rust in wheat will be entirely prevented*; for I have found in two adjoining fields, one of which was coaled and the other manured with farm-yard dung, the latter was greatly injured by rust, while that growing in the other was perfectly free from it."—*Buffalo Commercial Advertiser.*

THE AMERICAN AGRICULTURIST'S ALMANAC.

We are indebted to Mr. A. B. Allen for a copy of his farmers' Almanac, which, in addition to the usual lunar and solar information, contains copious directions for the monthly guidance of the farmer and gardener, both at the North and South. The whole, comprising some fifty-odd pages, is neatly done up in pamphlet form and furnished at the extremely low price of twelve and a half cents.

For the Southern Planter.

FALL PLOUGHING.

Mr. Editor,—I have been a subscriber to the Planter from the start, and now, after several years have rolled over, it gives me great pleasure to accord my testimony, humble as it may be, to its great and *increasing* value and usefulness. I have said, I have taken your paper all the while, and yet, sir, I have never written one line for it—and for the simple reason, that I could not bring myself to believe, that any thing, emanating from *my* judgment or experience, could possibly benefit any one of your readers, all of whom I am induced to believe are better farmers than myself. I have determined, however, at a venture, to depart from this line of procedure, and to offer my testimony in favor of *fall ploughing*. The article of "C." in your late number (October), which I have just read, induces me to take pen in hand, and do battle, with right good will, for what I consider the *quintessence* in managing a clay farm. Doctors will disagree.

Mr. C.'s land is the very land of all others that I should recommend to be ploughed in the fall. But strange to say, he has tried it, and failed. Why? *Because he did not do the thing right.* My land, or a portion of it, is of this kind of clay, that "runs together like putty," and yet, I *think* I have experienced the *greatest* advantage in fall ploughing. I conceive the error, of all those who object to this system, to consist in not *re-ploughing* their land. Now there is the gist of the matter. Let Mr. C. select a piece of stiff clay land this fall, plough it in beds, (single beds of five feet width) trench it well with the plough, and open the trenches with hoes, as he would in such land for wheat, so as to keep it well drained during the winter; and in the spring *throw up the same beds with single ploughs when the land is in good order*, and note the result. Let all objectors to this system do so, and give the result.

I do believe with Mr. C. that you had better let your land alone, than not to replough it—it will "run together like putty," and will not make any thing like as good a crop as if ploughed in the spring. My experience tallies with his. I have tried his plan—now let him try mine. The more "judicious" a farmer is, the more he will be out with fall ploughing, unless he *re-ploughs*. Land re-ploughed, works better the season through, produces better, and you will find, if the season is dry, that in putting in wheat, the re-ploughed land is more spungy, and easier to work—my negroes even observed this fact the past fall.

Respectfully, R.

MEDITERRANEAN WHEAT.

To the Editor of the Southern Planter:

Sir,—In a late number of your paper appeared a communication from Mr. R. B. Haxall, which was copied into the Richmond Whig, relative to the Mediterranean or Fly-Proof Wheat, which is so totally at variance with my experience and observation, that I, a stranger to yourself, desire

to give him and the agricultural public, through your journal, the results of my cultivation of that wheat. And I am sorry to see you, Mr. Editor, uniting with Mr. H. in depreciating a variety of wheat of which neither he nor you can know any thing. Indeed, Mr. H. even condemns the wheat before he has ground a single bushel. His objections are two:—first, that it is unfit for the manufacture of good flour; and secondly, he hints, and gives the authority of Dr. Gains, of Hanover, for one instance of the fact, that it will not generally prove as productive as the red May wheat. I will consider the latter objection first.

The best proof of the productiveness of any kind of grain consists in repeated instances of the gathering of heavy crops. And I will recount the various facts which have come under my knowledge, relative to the Mediterranean wheat. Two years ago I procured from the State of Delaware ten bushels; one half bushel of which I gave my brother. The nine and a half bushels I sowed about the middle of October, partly on a small piece of land which had given an indifferent crop of tobacco, and partly on corn field. I reaped one hundred and five bushels, being about seventeen bushels per acre, and eleven for each bushel of seed. Last fall I sowed about the same time in October, on a tobacco lot of nine acres, ten bushels of this wheat. The land had been somewhat improved, and partially manured the preceding spring; but the farm, after a long course of bad management, came into my possession about four years ago, and of course I have not yet improved any of it highly. Moreover, my overseer sowed the lot much too thin: he should have put two bushels per acre. A small portion of the crop is not yet cleaned, but from the quantity already fanned out, I know the product cannot be less than about one hundred and seventy bushels. I also sowed this wheat and the red May in my corn land, endeavoring to give them an equal chance, as to the quality of soil, time of sowing, &c.; and I am confident I shall find the product of the former, when cleaned, much greater than that of the latter. Whilst growing, the difference was extraordinary. My brother's half bushel yielded seven bushels, on land I thought very thin. Last fall he sowed about six bushels on about four acres of corn land, which had been tolerably well manured in the spring. He reaped sixty-five bushels. I sold a neighbor ten bushels last fall, which he sowed partly on flat land, after corn, and partly on higher ground. All his neighbors think his crop will be one hundred and fifty bushels. In every instance I have mentioned we could not have reaped much more than half as much from any other kind of wheat; nor, in four years, have I heard of any crop, or part of a crop, in my neighborhood, which has approached the cases above specified. The Mediterranean is assuredly a fly-proof wheat. I sowed it in one instance, adjoining purple straw, and in another, in close contact with the red May. The purple straw was almost destroyed, and the red May somewhat injured by fly; whilst not one could be found in the Mediterranean. The latter is so early a wheat as to be entirely free from rust also.—Notwithstanding the low estimate yourself and Mr. Haxall put upon this wheat, I must deem my own experience more satisfactory than the pre-judgment of an extensive miller who has never manufactured a barrel of flour from it, or the passing sneer of an agricultural journal, that it is "an exploded humbug." I shall, therefore, continue its culture, being convinced it will ordinarily yield from one-half to one-third more than any other wheat.

Mr. Haxall's main objection, that the wheat is unfit for the manufacture of good flour, shall be briefly despatched. On this point I have but one fact to state; but that is conclusive. I lately sent to a manufacturing mill in my neighborhood, on the South Anna River, thirteen bushels of this wheat, requesting Mr. Payne, the owner of the mill, to make the best flour he could, and hoping, as the result has proved, that I might show the fallacy of Mr. H.'s opinion. Mr. Payne wrote me that the wheat made 441 pounds of flour, which he says is of the best quality. Whether he included the toll in the above quantity I do not know; but if he did, it is probably as good a yield as could be expected of any red wheats. The *quality* of the flour is really admirable. It is the very best I have ever had ground, and as good as the best of Richmond manufacture. Mr. Haxall himself would, I have no doubt, be content to have his always like it; and if he will only give the wheat a fair trial, he will, I am sure, speedily confess his error. If our cook (a raw hand) makes good bread to-night, I will send down a loaf to your office to-morrow, by my wagon, in the hope that you will give Mr. H. occular proof of his mistake, and will make public acknowledgment of your own.

Your obedient servant,

H. N. PENDLETON.

Louisa County, Oct. 1, 1843.

The communication above was received during our absence from the city, and the loaf with which it was accompanied was submitted to a gentleman in whose opinion we have the greatest confidence—he pronounces it to have been excellent. We have no doubt from his representation of it that we could much easier have digested the bread than the style and tone of Mr. Pendleton's communication. Mr. Haxall is fully able to answer for himself; for

our part we have no "acknowledgment" to make: what Mr. Pendleton chooses to term our "passing sneer" we are ready to repeat. It was simply a statement that we sold several lots of this wheat in 1841 at a very high price, and that with the exception of Mr. Poe, the purchasers had expressed the opinion in 1842 that it was a poor thing. Whatever other people may think of it, we know that Mr. Haxall is not singular amongst the millers of Richmond in the estimate he puts upon the quality of this wheat.

From the Farmer's Monthly Visitor.

HOW TO SHARPEN A RAZOR.

Who that has had his voice change from the tenor pipe of adolescence to the bass tone of manhood—who that has reaped weekly, or oftener, his chin for a twelvemonth, that does not know, or thinks that he does, how to sharpen a razor? It is a very simple matter; only give it a good, keen, smooth, easy cutting edge, and it is accomplished; and any one may, but can every one do this? How does it happen that new razors are generally keen, cut the beard at first smooth and easy, and that three-fourths of them never after the first edge is spoiled are brought to their primitive goodness of edge?—Can this be in the making? Is it possible to have the very edge of any better stuff than that which lies close behind it; and yet would not this seem to be the case, for as we all understand as we believe, that the fault is in the metal rather than ourselves. But in spite of this, I cannot help believing that there was much wholesome and agreeable truth in the remark of an elderly man, who heard a stripling cry out against his razor, as he winced before the glass; "My boy," said he, "the good razors are in more abundance than the good sharpeners." In confirmation of this, do we not find in every considerable town and city, persons who deal in the exchange of razors, always ready upon the payment of a trifling difference, to give a second hand article with a keen hair cutting edge, for one that has tried the temper and patience of an excellent self-esteemed sharpener; and this same good-for-nothing article the following day perhaps is equal to any ever tried—"part of the stock of a deceased barber, the very best judge of razors in the whole city."

If these surmises show us the truth, and that the fault is rather in ourselves than in the cutlers, have we not something to learn in the way of putting a good edge upon this by no means unimportant instrument that we use so often? I have thought that the subject is of sufficient importance to receive special attention, and that in our academies, and if not there, in our colleges, a professorship in the art of sharpening razors would add more to the durable happiness of the scholars, than some that are sustained. Temper, time and money would be saved by it.

We may smile at this idea, as hardly worth a second thought, and yet is there not much that is taught in these places, which maintains a big little man of consequence, that is never after used in life, and while the fashion holds, do we not all require shaving, and that often too? We may know the Hebrew, as well as it can be, which few will understand if we use it, and yet be ignorant of the foundation of the daily practice of shaving.

Methinks we are spending too much in the preface, and that it is getting time to come to the edge of the matter. Be it so then—the affair only requires a little time, considerable judgment, and some care. Most razors then are badly sharpened from using a strop of leather to put the final edge on, or a soft, or stuffed strop purchased for the purpose, either of which renders the edge what is called round, or so thick near the real edge that it will pull the beard, but not cut it off. We farmers all know that a scythe or axe with a round edge will not go, and call for the grindstone: and can we expect a razor to work with a round edge? Yet a soft strop, or strop by way of refinement, produces this edge as certainly as if it were sharpened upon the inside of a ring. A razor strop then should be of thin leather upon a perfectly level, and perfectly hard surface; this will keep the edge sufficiently thin, and not wear it round. The next thing is always to draw from heel to point; and when it *is* sharp, *leave off*, for too much is as great an error as too little.

In moist weather the beard cuts easier than in dry: hence take more time in lathering the face in the latter case. The Egyptians rub the chin with soap for a considerable time before shaving, and in this preparation do pretty easy work with a dull tool; but both in good order are best. Accustom yourself to lay the razor as flat upon the face as possible, for this puts the edge at right angles with the beard; a slope is rather digging than cutting. When the job is over, dip it in hot water—wipe it dry—touch it twice or three times lightly on the strop, and either wrap the razor up, or put it in a case to exclude the air, for as the air will rust, so it will soon spoil the edge of a razor.

With these precautions we may do our own shaving with ease, and always with more advantage of time and money than when done by others.

A FARMER WHO SHAVES HIMSELF.

CURE FOR CORNS.

Corns may be cured by binding them tight at night with a piece of spunge moistened in a

solution of pearl ash. The corn may be brushed off in the morning, having been dissolved by the action of the caustic.

For the Southern Planter.

BEES.

Mr. Editor,—In the August number of the Planter, information is asked, relative to the "comparative merits of different bee-hives."—The bee has attracted from the earliest times the attention of poets and philosophers. Virgil calls honey "Cœlestia dona," (one of the gifts of Heaven,) and the history of this insect has been detailed by a number of authors, as Swammerman, Reaumer, Hunter, &c. But to return from this digression. Having been very successful in raising bees, I have concluded to give you my views on this subject.

In constructing a hive, the first enemy to guard against is the moth or candle-fly; this insect usually lays its eggs under the hive, when worms are soon hatched, and if not removed, will ascend the hive and certainly destroy the bees.

To prevent the moth laying its eggs under the hive, I have for the last several years cut a mortise in the bench about an inch deep and about two inches larger than the hive, and the hive is then set in this mortise, and the space of about one inch all around it is filled with mortar, then three one-inch auger-holes are bored in the hive about two inches from the bench, for the egress and ingress of the bees; and a small auger-hole through the bottom of the bench to let off water, should any get under the hive. I have near night watched the moths attempting to enter through these holes, and seen the bees chasing them away.

I made another experiment this year to obviate the attack of the moths. It was to cut a groove in the sides of the hive running up at an angle of about thirty degrees and commencing about two inches from the bottom, and after the bees are hived have a board ready, and slide it up close to the back of the hive, leaving the board projecting in front about one-half an inch for the bees to light on, and the same space between the front plank and the board, for the bees to enter: by this plan the worms are prevented by the board from ascending and getting to the honey, and the trouble of using mortar is also saved. I think it will succeed, but the experiment has been so lately commenced that I cannot decide with certainty.

The size of the hive is of great importance; my opinion is, that it should never be more than one foot square, nor more than eighteen or twenty inches high, and small or late swarms should be put in still smaller hives. If the hives are large, the bees do not throw out as many swarms, nor are they able to protect themselves as well as in smaller ones. A box about six inches high, and not quite as large as the stand, may be put on the top of those that appear to be full of honey; an auger-hole or two being bored in the top of the stand, and the box screwed on. The bees will soon fill it with delicious white honey; and this plan saves the difficulty and trouble of the old way of robbing.

The ant is also an enemy to be guarded against. The best plan, or the least trouble, is to have cotton carded into bats, and then tied around the legs of the bee-bench; this will prevent the ascent of the ants until the rains beat down the small fibres of the cotton, when they must be renewed.

The best location for bees, I think is in the open air under the shade of a tree; for the warm side of a house is objectionable, as the bees, by the warmth of their location, are induced to venture out in cold weather, get chilled, and are unable to return. I have a hive in my garret that has done well for several years.—The room is almost entirely dark, all the light holes having been carefully stopped, and carefully guarded against rats. The hive sits on a bench only a few inches from the holes in the end of the house through which the bees pass, and the legs of the bench have bats of carded cotton tied around them to obstruct the ants.—Every year I am enabled to cut off from the outside of this hive a quantity of the most beautiful honey-comb.

An opinion prevails that if bees have sufficient room that they will not swarm, but this is a mistake; for mine in the garret regularly swarm every spring.

Hoping that the above remarks may be of service, and that many, by them, may be enabled to enjoy "*laborum dulce lenimen*,"*

I remain yours truly, M.

From the South Carolina Planter.

ANOMALOUS DISEASE OF HORSES.

Mr. Editor,—Partly from taste, as well as circumstances, I have devoted a good deal of attention within the last ten years to farriery, and as anomalies in so important a practice, should not pass unnoticed, I select your valuable journal to report such cases.

You have, doubtless, heard of farriers "*cutting the hooks out of the noses of horses.*"

I accidentally saw this operation performed, on a horse with weak eyes, that was restored; and had reason to believe success had, in many *similar instances*, attended this operation.

The operation was done by cutting asunder two tendons on each side the nasal bone, and which took their origin on this bone.

* The sweet solace of our labors.

I sometime after this, had a horse, when about *fully grown*, (as usual with horses so predisposed) become weak eyed. He had a puckering on the inner corner of the upper eyelash, which by all traders, is regarded as a sure index of doubtful eyes, and that the predisposition will develope itself in the summer of the sixth year.

Having dissected the head of a horse, blind from *this* cause, and found the aforesaid tendon—after originating on the nasal bone, to be inserted in an expansive form on this corner of the upper eyelash; which fact, disclosed to me the philosophy of the operation, viz: that a disproportionate growth of the head and this tendon, at maturity, caused the tendon to *draw so closely* upon the ball of the eye, as by pressure to destroy the sight, which, when separated by the knife, caused a relaxation and consequent relief to the eye. I operated upon my horse, and his eye has been entirely restored.

Fully three-fourths of the blind horses I've seen, I am well assured, (*from this puckering appearance*) were blind from this cause, and could have been cured by this operation.

It may be proper to remark, that hooks is a misnomer. Indeed, I do not believe that hooks (or pterigium, as it is called in the human subject) exists in the horse. The cartilage which is exsected in the usual operation, for what is conceived to be hooks, is the consequence of inflammation, by that pressure upon the eye I have described. The predisposition to this, is doubtless, hereditary, often occurring in one, or both eyes of the same family.

In your next, I will refer to another anomaly causing blindness, blind-teeth.

FAIRFIELD.

OXEN.

We have been surprised to observe that at the late ploughing match of the Newcastle County Agricultural Society in the State of Delaware, an ox team, the property of Mr. Holcomb, ploughed an eighth of an acre in twenty-one and a half minutes, out-walking the horse teams, thirteen in number, by about a couple of minutes. We have very little idea in this part of the country of the perfection to which breeding and training have brought this useful animal amongst our northern brethren.

For the Southern Planter.

"SAND HILL HOGS"—NO GO.

MR. C. T. BOTTS:

Dear Sir,—Your October number of the Planter reached me last evening, and, as usual, I sat down and read it at once, for the meeting and communing with my agricultural friends, through the agricultural papers, is one of my greatest enjoyments. It seems so neighborly to have them drop in, though by proxy, and impart what is going on in different sections of the country. Oh! sir, how I do desire to make a visit and take you by the hand on your native soil. But these confounded hard times keep me, as I presume it does many others, at home. Well, perhaps it is all for the best; let it be so, but, thanks to pen, ink and paper, I will have a little chat with you at any rate.

Now, about this "Sand Hill Hog," which I find delineated in your last number of the Planter, are you really in earnest in recommending that ancient, and to many, well known breed of swine, to me for the improvement of my Berkshires? Why, sir, according to my notions in these matters, there could be only *two points* gained by the cross, and I very much doubt whether either would add much to my sales or my pork barrel. There are, however, a certain class of farmers, no, I cannot call them farmers, who are in the practice of allowing their hogs to shift for themselves, and if they can get a breed that will *out-run* their neighbors' dogs or a locomotive, that's the hog for them; but I have my doubts as to their willingness to *pay* one for the trouble and expense of procuring them, for I observe the terms are extravagant, in the extreme, quite beyond my means, and not at all suited to the times. This, however, does not lessen my obligations to you for your kind offer to procure "as pure a specimen of genuine blood as ever rooted in the sand hills of Alabama."

You will be surprised, I presume, when I inform you that we have nearer home, if not the identical breed, something as much like them "as one pea is like another." On my way home from Albany, yesterday, I met a large drove on their way to the Boston market, among which I noticed two that so nearly resembled your portrait as to be taken for the originals, with the exception of having more ears and less tail. This may be accounted for by their having "more foot" in escaping the dogs, by which means their ears have been preserved, and a fashion our western farmers have of cutting off their pigs' tails to *save food!*

This reminds me of hearing, a few years since, a young man relate some amusing incidents in his travels in one of our western States, where they were in the habit of treeing and shooting their hogs as we do squirrels. He also said that they were in the habit of tying knots in their tails to prevent them from slipping between the rails of the fence and encroaching on their neighbors' crops; and every hog found without a tail was considered an outlaw and free *game* for sportsmen. The very fact of their having no tail was considered evidence of their having been old offenders, and probably lost their tails in making the attempt, while the

knot was tied, to "enter their neighbor's cornfields."

There is a class which, probably might be benefited by a cross of your "Sand Hill Hog," who consider it a cardinal point to have them pretty well *up in the world*, even at the expense of long shanks. It is but a few days since, I received a letter from a gentleman complaining about some breeding sows I sent him. He says, "Most of my sows are *too low*,—that is, *not tall enough* to please most persons." And it is not long since a man called to purchase a South Down buck. He wanted a yearling; I had but two, and offered him his choice. After examining and handling them over several times he made choice of the one I considered the best, and marked him. Finally before he left the yard the two happened to stand side by side, he immediately dropped on his knees, took an observation across their backs and said he had altered his mind, and would take the other, for *he was the tallest!* So much for person's taste and judgment.

But to return to the "Sand Hill Hog." On a careful examination of the portrait, there is but one possible advantage he would be to me that I can think of. I have a piece of newly cleared ground of about two acres, filled with white pine stumps, which I have endeavored to plough, but found it rather troublesome, breaking my ploughs and worrying my horses—possibly if I had had a lot of the "Sand Hill Hogs" to turn in, it would have been broken up without any tear and wear of plough or horse flesh.

And now, sir, I have come to the conclusion, under all circumstances, of being contented with the breeds I now possess, viz: Berkshire, Neapolitan and Improved Chinese. My principle is to stick to a breed until I can find a better.

I remain, sir, a friend to improvement, and

Your obedient servant,

C. N. Bement.

Three Hills Farm, Oct. 12, 1843.

Our friend seems quite indignant at the bare suggestion of mingling the blood of the Berkshire with that of the ignoble "Sand Hill."—Now, the latter is an *older* if not a *better* race, and we presume in hogs as in men, the individual is to be esteemed for his long line of ancestors rather than for his own peculiar merits.—We thought too upon every principle of breeding, that if a hog at the cost of five hundred dollars was crossed upon one for which one hundred dollars was asked, the produce must be worth three hundred dollars. It was for these reasons then that we ventured to hint to Mr. Bement a union between the two houses of "Berkshire" and "Sand Hill."

If Mr. Bement, in despite of the hard times, will come to Virginia, where his name is almost as familiar as at Albany, we will promise him a welcome from every farmer in the State. But if circumstances forbid us the pleasure of his company, we hope, "thanks to pen and paper," frequently to enjoy a communion in spirit, if not in person.

PROPER DEPTH FOR SEEDS.

Various experiments have been tried to determine the proper depth at which seeds should be put. The following is the result of an experiment with maize or Indian corn:

That which was planted at the depth of			
No. 1.	1 inch,	came up in	8½ days.
2.	1½ "	"	9½ "
3.	2 "	"	10 "
4.	2½ "	"	11½ "
5.	3 "	"	12 "
6.	3½ "	"	13 "
7.	4 "	"	13½ "
8.	4½ "	"	—
9.	5 "	"	—
10.	5½ "	"	17½ "
11.	6 "	"	—

The Nos. 8, 9, 11, were dug up after 22 days, and it was found that No. 8 had an inch more to grow to reach the surface of the earth. Nos. 9 and 11 had just sprouted, but were short, and three inches below the surface. No. 10 came up in 17½ days, but the tender leaf remained only 6 days green, and then withered. There is no experiment which shows more clearly the advantage of a shallow planting in a soil not too loose, and trodden down, than this. The more shallow the seed was covered with earth, the more rapidly the sprout made its appearance, and the stronger afterwards was the stalk. The deeper the seed lay, the longer it remained before it came to the surface. Four inches was too deep for the maize, and must, therefore, be for yet smaller grain kernels.

Petri gives an experiment made on rye, with the following results. The first column shows the depth at which the seed was put; the second, the number of days that elapsed before it appeared above ground; the third, the number of plants that came up:

Depth.	*Appeared.*	*No. plants.*
1-2 inch.	11 days.	7-8
1 "	12 "	all.
2 inches.	18 "	7-8
3 "	20 "	6-8
4 "	21 "	4-8
5 "	22 "	3-8
6 "	23 "	1-8

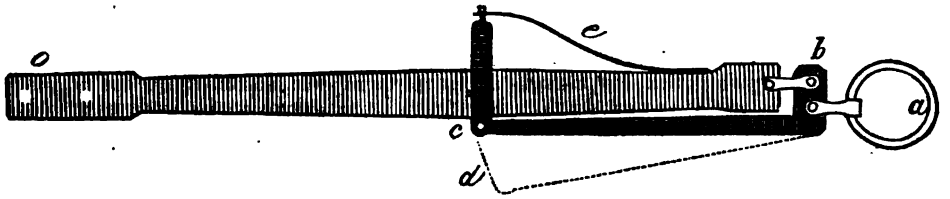
The root-stalk forms itself always next below the surface of the ground, and if we place the

grain deep, it must first put out its sprouts to the surface, and form its side branches in a nearer connexion with the air. We never find that the sucker-roots are ranged from below to above, but the contrary.

From the experiments of Ugazy, who tried seventy-six with different grains, it is clear that shallow sowing, if the seed is only so far covered as to sprout, and the germ is protected from immediate contact with the air, is preferable to laying the seed deep, because it springs up quicker, and acquires a stronger growth, and has hardier plants.

Burger's Economy of Farming.

DYNAMOMETER.



The engraving represents a plan of dynamometer, the invention of a very ingenious gentleman, Mr. Joshua Davis, of the county of Charlotte. From the working of a model which Mr. Davis has left at our office, we should not hesitate to pronounce this the simplest and most perfect instrument for the purpose for which it is intended, that has yet come under our notice. In fact, we consider that Mr. Davis has effected a great desideratum—he has produced this valuable instrument in a form, which makes it accessible to every farmer. A carpenter and blacksmith will do the whole work in a couple of hours. Under such circumstances no man who uses a plough, should be without this test of the draft upon his horses; for this constitutes now pretty much the great difference between one plough and another. The engraving speaks for itself; it is hardly necessary to say that the beam of the dynamometer is attached to the beam of the plough at (*o*), that the horses are attached to the ring at (*a*), that (*e*) is a strong steel spring, and that the movement of the scale (*c*) indicates the draft that is applied.

MEDITERRANEAN WHEAT.

To the Editor of the Virginia Herald:

Sir,—In the Herald of the 8th instant, (September, 1843,) an extract from the Southern Planter is published, which contains the copy of a letter addressed by R. B. Haxall, Esq., to the editor of that journal, and which offers to the farmers of Virginia the advice of that distinguished manufacturer of flour, as to the most advantageous species of wheat to be adopted and cultivated by them. At the same time he takes the occasion to denounce a species of wheat called Mediterranean, recently introduced into Virginia, as unfit for flour, and unproductive. The unfitness of this wheat for flour, Mr. Haxall infers from its dark *appearance*; he never having submitted it to the test of the manufacturer—and to corroborate this opinion of his, formed on the *appearance* of the grain, he refers us to the authority of Mr. Inspector England, who states, that judging from the *appearance* of the grain, the Mediterranean is an unfit wheat for Richmond flour. But he also says that no flour made of it had come under his inspection. Now in forming this opinion, but more especially before an opinion coming from such high authority was published, it is respectfully suggested to these gentlemen, that they should have observed an adage, as true as it is old, that the true test of a pudding is to taste it.—If, however, Messrs. Haxall and England meant to express the opinion that this wheat was unfit for flour of a superior grade, such as is manufactured in Richmond and at other mills, out of pure white wheat for family use, no doubt they are correct; for the obvious reason that this is a *red wheat*, and no *red wheat* ever did, or ever will, produce such flour as that described above. All which is claimed for this wheat, in that respect is, that it will yield as *much* and as *good* flour as any other *red wheat*; and this has been confirmed in Delaware, where this wheat has been extensively cultivated for the last twenty years. At first, the Delaware millers, judging from the *appearance* of the grain, decided that it was unfit for good flour; but on a full trial of it they yielded that opinion, and now take it, as they have done for many years, freely and with-

out abatement from the market price of other kinds of wheat; so do distinguished millers in the Valley of Virginia and east of the mountain, after trying it. If Mr. Haxall will cause this wheat to be manufactured, and then pronounce it more unfit for flour than other *red wheat* is, such a decision would merit great consideration. In the mean time I am constrained to give credit to those who have tried and approved of it, to the extent above stated. Mr. Haxall, or the Editor of the Planter, (I am not certain which,) claims this wheat as "an old acquaintance," and denounces it as an "exploded humbug." Now there is something of mistake in this, seeing that it has only been about three years since the writer of this first introduced this "old acquaintance and exploded humbug" into Virginia. But Mr. Haxall not only denounces this wheat as unfit for flour, but condemns it as being unproductive, except that it may have been productive in a few *particular instances*, and adds, that if inferences be drawn from these *particular instances*, that such is its general character, farmers, he is sure, will find themselves mistaken. All this is quite correct; and yet in order to establish his assertion that the wheat is unproductive, the only evidence he offers is a *single instance* in which Dr. Gaines made less of this, than of the red May wheat. It seems, then, that though Mr. Haxall warns us against forming a favorable opinion as to the general character of this wheat, in consequence of its success in *particular instances*, he denounces it because it failed in a *single instance* to produce as good a crop as the red May wheat. Opposed to this *single instance* of Dr. Gaines, I am warranted, on the best authority, to state, that it is the concurrent opinion of the best farmers in Delaware and Pennsylvania, that this wheat, side by side, or anywhere, under the same circumstances, is more productive than any other wheat known to them. Such is the opinion of all in this, and other sections of the country, where it has been cultivated the two or three years past. Besides these testimonials, affirming the productiveness of this wheat, is the fact, published on good authority, that a gentleman in Maryland, Mr. Carmichael, made from twenty acres of land, one thousand bushels of the Mediterranean wheat, this present year, and I have a letter from Commodore Jones, in which he says, that a specimen of this wheat which he obtained from me, though sowed late in October, 1840, and under rather unfavorable circumstances, produced forty measures for one of seed. Other similar results could be enumerated to sustain the productiveness of this wheat. But Mr. Haxall and the Southern Planter, have overlooked the real merit of this wheat and its singular benefit to all farmers, where the Hessian fly exists. It is the only known wheat which can be sowed in proper seed-time—that is, from the first to the twentieth day of September, and resist the ravages of the Hessian fly in the fall. It is the only known winter wheat which forms a hard ground joint in the spring, before the fly in the spring attains the maggot state—and as it attains maturity from eight to ten days earlier than any other winter wheat, it is never materially injured by rust.—To farmers, then, who are subject to the ravages of this destructive insect to their wheat crops, especially to such as have suffered from it as I have, I confidently recommend the Mediterranean wheat. For myself, sad experience has taught me, that I am bound to adopt that wheat for seed which will *certainly*, not *casually*, resist the ravages of the Hessian fly. This, I know, the Mediterranean wheat will do, and at the same time yield, according to the season, and the land it grows on, as good a crop as any other wheat, and will weigh from sixty to sixty-four pounds to the bushel. To give it a full and fair test in all these respects, it should be sowed between the first and fifteenth days of September—minding to give a *full* allowance of seed, according to the strength of the land, and not to cut it till quite ripe. If cut in the moist, or dough state, as wheat sometimes is, the grain of this, as does the grain of all red wheat, assumes that dark appearance, which has brought it into such bad repute with Messrs. Haxall and England. If any one will present a species of wheat that will resist the fly, escape rust, yield better flour, and produce more grain to the acre, than this wheat, he may justly denounce it; but, till that occurs, I shall, for one, adhere to it. By the way, in regard to the red May wheat, so justly commended by Mr. Haxall, for the beauty and quality of its grain, I obtained a parcel of it some twenty years since, from a friend on James River; but after three or four trials of it, I was most reluctantly forced to abandon it; because if sowed in any reasonable time in the fall, owing to its delicate root, the fly destroyed it. If sowed later to escape the fall fly, owing to the same cause, the frost of winter, was fatal to it. Such was the result as to several other species of forward wheat of which I made trials.

September 11, 1843.

We clipped the foregoing from the "Herald," and handed it, together with Mr. Pendleton's communication, to Mr. Haxall, from whom we received the following reply:

Mr. Editor,—I addressed you a communication, which appeared in your September number, in relation to the merits of the Mediterranean wheat, and promised that you should hear further from me on the subject in time for publication in your number for October. I regret that I could not carry out my wishes in this respect

as it has now become almost too late in the wheat sowing season to discuss this matter further. A few weeks since I sent to the mill of Mr. Bragg, in this city, one hundred bushels of this variety of wheat, with the request that it should be carefully ground, as an experiment to test its fitness for the manufacture of a superior quality of superfine flour. The proceeds returned to me from the one hundred bushels are only fifteen barrels of good, but not superior, superfine flour; which, as you will perceive at once, is a yield of only one barrel of flour from something over six and a half bushels of wheat; a result which every miller and farmer must know is very unfavorable. In extenuation of so bad a yield, Mr. Bragg's millers represent that the wheat was damp,—which I have no doubt was the case—but not more so, I think, than one-half or more of all the wheat arriving at Richmond about that time. So far, then, as this experiment goes, it confirms the opinion I expressed against the adaptation of Mediterranean wheat for the manufacture of flour to come up to the standard of the Richmond City Mills; for what may fairly be inferred would have been the quality of this flour if the ordinary quantity of five bushels to the barrel had been taken to market?

When I ventured before to say something against this wheat my object was not to condemn it altogether, but more to call the inquiring attention of farmers to it, before they gave full credence to the wonderful accounts of it, and particularly, before they had extensively purchased it for sowing this fall, and I little thought that I should excite so much feeling as is manifested in the communication addressed to you on this subject by Mr. H. N. Pendleton. I can say to this gentleman that his mode of discussing a matter of this sort is not the proper one by which to arrive at satisfactory results. It appears to him very strange that I should say anything against this wheat before having it ground into flour—and a similar notice has been adopted, but more respectfully expressed, by a writer in the Fredericksburg Virginia Herald. To both of these gentlemen I have to reply and defend what appears to them so unreasonable, by saying that I have had an experience of about twelve years in judging of many varieties and all qualities of wheat by their appearance only, and have yet to discover my ignorance in so doing, and whilst I have great confidence myself in such evidence, I did not ask your readers to give full faith to it—but on the contrary I promised to give them further proofs in the actual grinding of the wheat, and this would have been sooner done but for circumstances which I could not control.

Mr. Pendleton has gone beyond any one I have heard of in his estimate of this wheat for making superior flour, and thinks it equal to the best of Richmond manufacture; whilst the writer in the Virginia Herald claims for it only an equality with other red wheat. Even this last I am not prepared to concede in the present state of my information, and will now express the opinion that the red May, purple straw and other varieties of red wheats usually cultivated in this portion of Virginia, will in their most perfect condition and quality produce more and better flour than the Mediterranean in like condition and quality, and I am thus convinced by the appearance of the wheat, the formation of the grain, its complexion, brightness, &c. It may be, that the cultivation of the Mediterranean wheat in this vicinity is not very well understood, and the samples I have seen not the best of the kind; for I observe that the writer in the Virginia Herald recommends that "it should be sowed between the 1st and 15th of September, and not cut till quite ripe."

It is only with the quality of this wheat and its fitness for making good flour that I claimed to have any knowledge, derived from my own observation, and I should not have mentioned its unfavorable yield upon the farm of Dr. Gaines except for the fact that I heard of it about the time I was writing to you and felt it my duty to make it public to check what appeared to me too great a desire among many farmers to purchase this wheat for sowing this fall before they had formed an intimate acquaintance with its properties. Since that date I have been in the State of Delaware, where the Mediterranean wheat is well known, and the information I obtained concerning it differs materially from that in the Virginia Herald derived from the same State, and I can account for the discrepancy only by the supposition that opinions there disagree concerning it. I was told there that the Brandywine millers had not become reconciled to it, and purchased it more from necessity than choice. But in regard to productiveness it was in high favor among farmers; for moderately improved lands yielding fifteen to eighteen bushels per acre. Upon the best lands the yield was not in proportion, being inclined to grow too high, and consequently to tumble.

The great yield obtained by Mr. Carmichael and Commodore Jones, as stated in the Virginia Herald, is certainly very favorable to this kind of wheat, and if the like can be effected here, it is destined to become a favorite wheat, but not, I hope, to supplant the beautiful white wheats, which I am confident are essential to maintain the present ascendancy of Richmond City Mills flour. I shall now take leave of this subject for the present season, at least, and wait further trial with the next crop, either to confirm or remove the impressions I have adopted concerning Mediterranean wheat.

Yours, truly, R. B. HAXALL.

October 24, 1843.

For the Southern Planter.

COVERED DRAINS OR BLIND-DITCHES.

Mr. Editor,—I have not long been a reader of your very valuable paper, and although I subscribed for, and have obtained all the numbers, bad health has as yet prevented my reading them with desirable attention. So many valuable things have been said in them, that it would seem there could not much be added, at any rate, by me: I will, however, say a word on the above heading, having seen the subject touched several times in the Planter, and in the July number, by Mr. Morriss. It has always been a subject of wonder to me how, or rather why blind-ditching (as I choose to call it) should require much labor or expense. If you have a large or main ditch, (as is a matter of course) cut your side ditches sloping into it, (according to Mr. Morriss) varying the size agreeably to the situation of the land; put in the bottom of these ditches two pine poles by the side of each other, say about six inches in diameter at the but and break the joint with a third, letting the large ends extend to the edge of the main ditch, and so continue the poles to the end of your cross-ditch; throw back the earth and I will insure the land may be worked through all time, as green pine poles seldom, if ever, rot when buried in a wet soil. If there be trash or brush at hand chopped to pieces and scattered on the poles, it would do no harm; indeed, land that is not very wet, may be greatly benefited, and in some instances sufficiently dried, by cutting your ditches as above, and simply returning the earth, after a few days, from whence it came, without any thing else being placed in the bottom.

Respectfully, A Subscriber.

Powhatan, Oct. 19, 1843.

This plan, with various others, has already been recommended in the Planter. But we remember that this subject constituted one of the topics of discussion with the Farmers' Club of Henrico last summer. There it was unanimously agreed that these pine pole ditches would not last more than three, or four years, at the farthest. The members of the Club seemed to be vividly impressed with the value of under-draining, but they seemed also to concur in the opinion that unless stone could be conveniently obtained for the bottom of the ditch, it was hardly worth making. One gentleman, however, who found it necessary to substitute something for the poles, which had entirely rotted, having no stone, was at that time in the course of an experiment with cypress plank.—We think this also will likely prove a failure; for although even a green pine pole will, to use our correspondent's expression, last through all time if buried in the soil so as to be completely excluded from the air, yet there is no situation in which timber will sooner rot than in one of these ditches, with one side next the earth, and the other alternately exposed to air and water.

For the Southern Planter.

HARD TO BEAT.

Mr. Editor,—A gourd vine grew on the Frederick's Hall estate this year from which was gathered on the 10th of this month four hundred and three gourds, being the largest yield ever heard of. Besides the four hundred and three, there were a good many destroyed, say some twenty or thirty. They were all fully matured, and though the above may appear almost incredible, it is not the less true; I think, therefore, you will join me in saying, "*It is hard to beat.*"

Your friend, R. R. P.

Frederick's Hall, Va., Oct. 17, 1843.

NORTON'S SEEDLING.

We see that a Mr. Longworth has been furnishing the good people of Boston with a grape that has attracted much attention. He was unaware of its origin, but has offered a premium of five hundred dollars to any one who could excel it. The connoisseurs of Boston have determined it to be the Norton's seedling, a slip of which it is supposed accidentally found its way among some other vines obtained by Mr. Longworth from Virginia. This grape, which derives its name and celebrity from our late townsman, Dr. Norton, is not only valued for its wine making properties, but it is esteemed by many the finest table grape we have. Our old friend, Mr. John Carter, of this vicinity, is prepared to furnish either slips or roots of this admired variety, at very moderate rates.

From the American Agriculturist.

VIRGINIA LANDS.

Dear Sir,—I am thus far on my return from an exploration of that part of Virginia lying within a circuit of fifty to one hundred miles from this place, and do not hesitate to say, that considering its advantages as an old country, it is much to be preferred for settlers from the north, than any part of the west with which I am acquainted. Lands can be had here, that are really quite eligible, from five to fifteen dollars per

acre; and though apparently poor and exhausted, there is abundant material close by for renovation. I shall give you details hereafter, not having time now. Our company have about concluded to settle at ——, but more of this anon. Wheat and other grains have proved a good crop; corn looks well now, though it has suffered some from the drought.

Yours, sincerely, G. A. C.

Washington, D. C., Aug. 4, 1843.

We wish we had more than the initials of the correspondent of the "Agriculturist." We honor this gentlemap and his associates for their sagacity. With them we believe that there is no portion of the west that offers such inducements to the intelligent, industrious settler, as the low priced lands of Virginia.

It is not less strange than true, that these lands, which are preferred by our sagacious neighbors to any investment that they can make in the west, are sold nine times out of ten for the purpose of effecting a removal to the western States. The demand for Virginia land is becoming very great amongst the northern emigrants. They have not yet penetrated into the "bowels of the land," but have been satisfied with what they have found in the border counties of Loudoun and Fairfax. We hail the advent of these enterprising strangers amongst us with great pleasure, and yet, it is a melancholy sight to see the old proprietors, ignorant and obstinate as they are, pushed from their stools and driven into the wilderness by the superior intelligence of these foreigners. The new comers have been, doubtless, readers of agricultural papers; they are "book farmers;" they have kept up with the improvement of the age, and now they come here, and with a few pieces of silver they bribe our poor, ignorant, deluded people to quit forever their kindred and homes, to yield their delightful climate, their grateful but abused soil, to abandon the fellowship of men, and condemn themselves to lives of unremitting labor in the midst of a howling wilderness. Truly, our northern friends have read works on agriculture to some purpose!

For the Southern Planter.

BERKSHIRES AND DICKEN HOGS.

Mr. Editor,—Please inform your correspondent T. G. T. in the September number of the Planter, that the arrangement between Col. B. and myself to match the Dicken hogs against the Berkshires was not effected, because I could not procure a male in the neighborhood to breed from, not that my wish to test the relative merits of the two stocks or my confidence in the superiority of the one over the other, have in any degree abated. So earnest was I, that I even sent to Baltimore, where, notwithstanding the kind exertions of Mr. Sands, of the American Farmer, I was unable to procure one. The cross of the Berkshire upon the other, has most frequently the effect of reducing the size of the Dicken hog considerably, and of producing a small animal with great propensity to take on fat. None of my subsequent experiments in crossing have equalled the first.

W. H. Richardson.

For the Southern Planter.

TOBACCO.

Mr. Planter,—Tell your tobacco makers, in curing their tobacco they may save half their time, half their wood or coal, and half the danger of burning, by letting in the air near the bottom of their houses, leaving the door open. The air should be admitted all round the house at bottom regularly and freely. It is worth the trying, and they will then know for themselves, and the tobacco will never sweat nor scald.—Never burn a stick of green wood under tobacco if you wish to cure it well. J. H.

IMPORTANT TO LADIES.

An English paper has the following card to all fair lovers of worsted work:

"Half a pound of soft soap, half a pound of honey, one pint of English gin, mix all well together, and, with a sponge, clean the work with it, and then apply cold water in the same manner; dry with linen—the brightest colors will be uninjured."

The companionship that exists between an Editor and his readers, naturally begets a desire upon the part of each to know occasionally how the other is getting on in the world. We take this opportunity, therefore, as our third volume is drawing to its close, to inform our friends that the prospects of the Planter were never brighter or fairer. After years of unrequited toil, we are

beginning to reap the reward of our perseverance. Our list has increased, and from assurances that we have received from various parts of the country, we are flattered into the belief that our number will probably be doubled during the next twelve months. Although there may be something like presumption in appropriating to ourselves what has probably been done for the cause of agriculture alone, we cannot help feeling personally grateful for the various efforts that have been made to extend the circulation of the Planter.

It has been sneeringly said that the great agricultural State of Virginia, with all her boasted intelligence, could not support an agricultural paper. The Planter offers the only opportunity that now exists of refuting this calumny. We have always maintained that there were six thousand persons in the State of Virginia who would cheerfully pay a dollar a year towards the support of an agricultural paper, if the knowledge of its existence was brought home to them. Upon this calculation we reckon that there are three thousand who have never yet heard of the Planter. The low price at which we publish the paper, cuts us off entirely from the services of an agent; we are dependant, therefore, for those services upon our friends, who reap the benefit of this reluction.

We were so fretted with the ridiculous law which imposes upon us a rate of postage so unequal and so unjust, that we determined to change the form of our publication, but upon an intimation to that effect, we were overwhelmed with so many entreaties to the contrary, that we have determined, instead, to endeavor to obtain some reformation in the postage laws, which are so manifestly absurd, that Congress is avowedly waiting only for an opportunity to attend to the *practical* affairs of the nation, to reform them altogether.

We have been seduced into a trial of the credit system, by which we have now some three or four hundred dollars due us for this year's volume, that is probably not worth a button. We, therefore, utterly abjure it from this time forth, now and forever. In no case will we send the paper hereafter until we have received the money. We know that this rule may subject us and others to some inconvenience, and we know there are hundreds who will order the paper, whose responsibility is good for thousands, but if we make a rule, we must stick to it, and we can never consent again to be employed in dunning subscribers for a dollar apiece.

It would be a great accommodation to us, if those who design taking the paper next year, would inform us of the fact as soon as possible. We should like to form some idea of the edition that will be called for. For want of this knowledge, we have once or twice been put to the expense of a *reprint*, and now we are sadly in want of the second volume, for which we will gladly pay the subscription price.

GOOCHLAND FAIR.

We are requested to state that the Goochland Agricultural Society will hold its next annual meeting and fair at Goochland Court House on the 9th of November. We understand that a very lively spirit exists among the farmers of the county, and that a very interesting meeting is anticipated.

CONTENTS OF NO. XI.

Wheat—Thin seeding recommended, p. 241.
Poudrette—Testimonial of its value, p. 242.
Covering—Its value, p. 243.
Horses—To purge, p. 243.
Agricultural Fair—In Orange, p. 243.
Cream—Directions for making clouted cream, p. 243.
Lard Lamp—Described, with a cut, p. 244.
Poudrette—That from the New York Company denounced, p. 245.
Farm Report—Report of the Orange Agricultural Club on the farm of Mr. James Newman, p. 246.
Seeds—Directions for selecting, p. 247.
Horses—To make them pace, p. 247.
Edge Tools—To temper, p. 248.
Chickens—Excellent directions for managing, p. 249.
Hogs—Proper management of, p. 250.
Farm Buildings—Proper arrangement of described, with a cut, p. 251.
Vegetables—A forcing liquid for, p. 252.
Johnson's Encyclopedia of Agriculture—Noticed and recommended, p. 252.
Charcoal—Its properties as a fertilizer, p. 252.
Fall Ploughing—Its advantages, p. 252.
Wheat—The Mediterranean recommended, p. 254.
Razors—Direction for sharpening, p. 255.
Corns—To cure, p. 255.
Bees—To manage, p. 256.
Hooks—The origin of, and remedy for, this disease in the horse, p. 256.
Oxen—Quickness of movement, p. 257.
Sand Hill Hog—A communication from Mr. Bement, p. 257.
Seeds—Proper depth for, p. 258.
Dynamometer—New form of, with a cut, p. 259.
Mediterranean Wheat—Recommended, p. 259. A communication from Mr. Haxall, p. 260.
Ditches—A communication on covered drains, p. 262.
Gourd Vine—Hard to beat, p. 262.
Norton's Seedling—Highly esteemed in Boston, p. 262.
Virginia Lands—Sought for by northern emigrants, p. 262.
Berkshire and Dicken Hogs—p. 263.
Tobacco—To cure, p. 263.

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts. *Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS, Editor.

VOL. III. RICHMOND, DECEMBER, 1843. No. 12.

CLIMATE.

We have once or twice called the attention of our readers to the American edition of the "Farmer's Encyclopedia." We observe that an article in this work upon the subject of "the influence of climate on the fruitfulness of plants," has provoked thunders of indignation from some of our southern cotemporaries, and they do not hesitate to denounce the whole work as unworthy of southern patronage, because of the libel perpetrated on the South. The objectionable article is peculiar to the reprint, and has been adopted into it from a number of the "American Journal of Geology and Natural Science;" the author is understood to be the American Geologist, Mr. Featherstonaugh. The position taken, is, that "the cultivated plants yield the greatest products near the northernmost limit in which they will grow." To support this visionary notion of a very visionary gentleman, various ingenious arguments and statements are resorted to. The latter are certainly gross misconceptions of facts; many of them, it is true, are of a very vague and indefinite character, but some of them are more precise and tangible. For instance, he speaks of the neighborhood of Philadelphia as being the latitude for *melons*. Surely the author had never eaten a watermelon or canteleup in Virginia, or he would never have ventured upon such an assertion. To be sure, the old maxim says, *de gustibus, non est disputandum*, there is no disputing about taste; therefore, the opinion of no one individual on this subject is to be preferred to another; hence we do not hesitate to oppose our own to that of the celebrated Mr. Featherstonaugh. Our opportunity for judging has probably been much greater than any he could have enjoyed. We have been in the habit for many years of paying annual visits to the North, and generally at that season when our melons have past, and theirs have just come into the market. Now, if we know a delicious, delicate fruit from a cold, insipid one, we may be trusted in saying, that there is no comparison between the *flavor* of the northern melon, grape, and peach, and those that are raised in Virginia. Personally we are not acquainted with those that grow farther south, but have always imagined them to be even superior to our own. How is it with tobacco, one of the plants that our author alludes to in support of his theory? Its acknowledged perfection is attained in the region of Virginia, yet it grows, and is cultivated, as far north as Connecticut.

To various climates Providence has undoubtedly assigned various plants and fruits; and the greatest number of these will be found in those latitudes that lie between the two extremes; or, in other words, in the temperate zone. There is one circumstance that has, we think, served to mislead Mr. Featherstonaugh in his conclusions upon this subject. It is very true that plants have been gradually progressing northwards, and we believe the day is not very distant when melons and peaches may be grown to great perfection in Pennsylvania and further north; but it will be when these regions exchange the furs of winter for the mantle of summer. Let them not despair; *frigida Gallia*, is now translated "sunny France," and the clearing of forests and the opening of the earth are gradually extending equatorial warmth and fruitfulness into their inhospitable regions.

Upon the whole, we look upon this as a labored, and perhaps excusable, effort in a citizen of the North to persuade his countrymen of the existence of advantages which their rapid emigration to the South proved them to be ignorant of. But our Southern friends have shown themselves far too sensitive upon this subject, and by their extravagant and unjust denunciations of the excellent work into which it has been incorporated, they have given a notoriety and an importance to the article, which its intrinsic merits would never have commanded for it.

We cannot close these remarks, already too long for the subject, without noticing an opinion

expressed by Mr. J. T. Leigh in the last number of the Cultivator, as to the comparative healthiness of Mississippi and Virginia. That there are some spots in Mississippi more healthy than some spots in Virginia we do not entertain a doubt; but if Mr. Leigh thinks there is any kind of comparison between the general healthiness of the two States, we can only say, he is the only individual we ever heard express that opinion.

For the Southern Planter.

CHARCOAL.

In a late Cultivator I find that Mr. Weaver, of Rockbridge county, has reported the result of an experiment made by him of charcoal on wheat land. He states that he could perceive no effect in any way. I, too, (it will be recollected) have been making experiments with coal on wheat, corn and pasture; and now report: The lot of wheat consisted of three acres of poor level white clay, which is known to be most unfavorable to wheat. It was sown late, and being in a large grass field was grazed by sheep till late in the spring. It made about eighteen bushels of grain weighing sixty-four pounds to the bushel, and not a particle of rust was to be seen.

A portion of the corn ground which was coaled was of the same description as above mentioned—had never been manured, and produced more than double what it has ever done within the last thirty years. This corn took a handsome start to grow—was greatly checked by the drought of June, but the rains of July and August gave the above result, say six barrels to the acre.

It has been near three months since I was on the pasture ground, at which time I could perceive no effect from the coal, but doubt not of seeing it next year. Let it be remembered that Mr. Weaver's experience was with pure coal, mine with the commixture of coal and covering of the pit. Mr. W. does not state the quantity used by him, it is, therefore, probable that the quantity was large; thus furnishing an overdose of ammonia; in which event rust would be the consequence, as was the case with his field, whether coaled or not.

I shall continue my experiments and reports.

ZA. DRUMMOND.

Amherst, October, 1843.

From the American Farmer.

IMPROVEMENT OF CORN, WHEAT, &c.

I had the pleasure, a few days ago, of showing you a couple of stalks of corn, *each containing seven perfect ears.* They were taken from a field of twenty-five acres, on the farm of Gen. T. M. Forman, of Cecil county, Maryland, and were a fair sample of the crop. Gen. Forman informed me that he had many years ago adopted the plan of selecting his seed corn, always taking it from the stalks that have the greatest number of perfect ears; and that by continuing this practice he has brought his corn to the high quality represented by the specimens alluded to. This has been uniformly the result with all who have perseveringly practiced it. The first, I believe, to do so, was Mr. Cooper, of New Jersey, forty or fifty years since; then the "Maryland twin corn" was produced by some gentleman on the Eastern Shore; then the Baden corn was announced, and the Mercer corn, also; all were produced in the same way. General Forman intends to measure an acre, which shall be a fair sample of the whole field, and let us know the quantity of shelled corn it shall have produced; this will enable our farmers to compare the product of this corn with that of the common kinds.

A word or two on the utilty of attending to such things by our farmers. The wonder is, that every body does not do it, and the only reason I can suggest for its not being done, is, that people are not generally aware, that all kinds of plants may be improved by careful attention to *breeding*, just as much as animals are. There are at this day very few farmers so ignorant as not to know that their horses, cattle, sheep and hogs, are wonderfully improved by a judicious selection of breeders. You will scarcely find a farmer now that does not improve his stock by this means. I need not enlarge on this fact. But where are they that improve their corn and wheat, and rye and oats, in the same way? They are only found here and there, and so seldom, that they are considered prodigies. Every body, almost, when he wants an improved article of this kind, purchases some celebrated kind for a trial, which may or may not be what is represented, or may or may not suit his soil or his climate; but never thinks of improving what he has already got. No one ever thinks of crossing the breed of his corn, wheat, rye or oats, and thus improving them; and very few even take the trouble of selecting the best of that which they have for seed. Let me assure our farmers that they can improve their corn and all other crops by *cross breeding*, just as easily as they can their animals. They can change the size and color of the cob; make the corn early or late, yellow or white, soft or flinty; all by *cross breeding*, with no cost and very little trouble.

Generally, all that is done to improve our crops is by manuring the land and cultivating the growing plants. Now for a moment let us see how it would do in improving animals,

merely to feed them well and give them good stabling, paying no attention at all to the selection of breeders. All will admit that stock raised and kept in this way would soon "run out," no matter how good it may have been at the beginning. Well, what is high feeding of stock but analagous to high manuring of land? The one feeds the cattle, the other feeds the crops; neither does any thing more than supply the wants of the individual animal or plant It does not and cannot change the character or quality of its progeny. When *feeding*, either of plants or animals, does all it can, it does no more than simply keep the individuals as they were, in reference to their natures—it generally produces a good crop, or a fat animal, and that is all.

"But," I anticipate I shall be asked, "*how* are we to improve our corn, wheat, &c. by cross breeding?"

Wheat, rye and oats, may all be treated alike—and the process given for one will answer for all. Take several *good kinds* of wheat, bald headed and bearded, blue stem, purple stem, red and white, five or six kinds in all; mix them together thoroughly, and sow the parcel in some good ground at a considerable distance from any other wheat field. At harvest time go into the field and select the best heads, those that are largest, best filled, and that contain the best grains, on the shortest and robust stalks, and keep the seed for another year's sowing. The next year at harvest make the same selection for seed. Continue this selection for two or three years, and then you will find you will have a wonderfully improved variety of wheat. But to keep the quality of this new wheat up to its standard, and even to continue the improvement, you ought always to select a quantity for the succeeding year's sowing in the same way. This is not as troublesome as at first sight it appears to be. A half a bushel or a bushel of seed wheat may easily be selected in this way in a few hours—hours that possibly might not have been devoted to as profitable employment.

The *cross breeding* of corn requires a little more trouble. You have an excellent kind of corn, but it is late in maturing and has rather a large cob. Select some other kind of corn that ripens as early as you desire, and has the right sized cob. Plant your late kind as early in the spring as you can, in every alternate hill, leaving the other hills vacant. At a later period, say twenty to thirty days later, (according to the difference between the two kinds,) plant the vacant hills with the early corn. The place of the experiment should be remote from any other corn field. Cultivate both in the usual way, until you observe the tassels of the early kind beginning to push. Then carefully cut out all the tassels of this early kind—do nothing to the late kind. Watch carefully and cut out all tassels as they appear from this kind. When the corn is ripe select all the good ears of the early kind for next year's planting. Plant this selected seed in the usual way the second year, and when ripe, select the best ears of the earliest ripening. You will find in these ears a variety of grains in shape and color, and of different quality—there will be grains resembling both original parent stocks. Now select the grains that suit you. All the grains will produce a small cob and early corn; but some of the grain on the cobs may be small and inferior like the original parent; therefore, on this the third year, select the grains. Generally this third planting will establish the variety; but the better way is to continue to select your seed every year. You may now select seed with a view to increasing the number of ears to the stalk; but take care to avoid selecting small ears simply because there are many on the stalk. If you find a stalk with three full sized ears, it is better to take them than those from a stalk that has four small ones.

By these means corn is susceptible of almost any degree of improvement and change of character; and I am fully satisfied that there is no one branch of agriculture that would so well pay for the small amount of labor and attention required.

AGRICULTURAL AND HORTICULTURAL FAIR OF THE HENRICO SOCIETY.

On the first day of November, the Agricultural and Horticultural Society of Henrico, held their sixth fair in the public room of the Exchange Hotel. The fall meeting is chiefly horticultural, and we were rather disappointed at the meagre exhibition of fruits and vegetables. We missed, particularly, that beautiful display of dahlias, that gives such a charm to these exhibitions in the northern cities.

But there was a new feature added to the exhibition this year, that we were pleased to find excited the liveliest interest among the visiters. Premiums were, for the first time, offered for the best specimens of mechanical skill in the different arts, and the exhibition proved, as we knew it would, that our city artisans, in several departments, can vie with any in America, probably with any in the world. There was a case of surgical instruments from the manufactory of Mr. KERN, that we have good authority for saying cannot be excelled, hardly equalled, in the Union. There were displays of harness and saddlery by Messrs. COLQUITT, OTEY and AUSTIN, that would have done honor to the best exhibition at the American Institute in New York.

Mr. Samuel Denoon exhibited grates of patterns and workmanship to please the most fastidious. Mr. Hill, in addition to some elegant boots that would have graced the foot of the most exquisite dandy, exhibited a pair of shoes of superior workmanship, substantial and neat, the very thing for a farmer's wear. These unanimously secured him a premium in this department. We must not omit the beautiful display of guns and rifles from the manufactory of Mr. Thomas Tyrer, for which the Society awarded him an honorary medal. Virginia sportsmen will hereafter need go no further than Mr. Tyrer's shop to supply themselves with an outfit in the most elegant and approved style.

But above all, we were most astonished at, and interested in, a pair of blankets of superior quality from the manufactory of Mr. Bonsack, in Botetourt. We should like to know something of the history of an establishment that produces such goods as these, and will be much obliged to Mr. B. or any friend of his who will introduce us to the establishment. We are satisfied that the day will come, when the sheep and wool business will be a great one in Virginia. The sheep are only waiting for the manufactories, and the manufactories are only waiting for the supply of wool.

But to return to the exhibition. The specimens of needle work were very beautiful, and excited great admiration. The fair altogether, was esteemed by many the most interesting ever held by the Society.

The mechanical department, interesting as the exhibition was, was not half represented, and we think we see that a degree of emulation has been excited among the mechanics of Richmond, that will, another year, lead to an exhibition, which of itself will be worth a visit from the most distant part of the State.

An address was delivered before the Society by C. T. Botts, Esq., of the merits of which it does not become us to speak.

From the South Carolina Planter.

LARGE YIELD OF POTATOES.

I have delayed sending an account of my last year's potato crop, as I promised, until the account kept by the boys who did the work, is lost, so that I am unable to arrive at the cost. The quantity of ground was 32 square rods of old and poor land, manured with stable manure and broke deep, then furrowed off with a shovel plough, about 21 inches apart, the furrows nearly filled with barn-yard or long manure, the potatoes cut and dropped; the pieces about nine or ten inches apart in the furrows on the manure, then slightly covered with a hoe, leaving the surface smooth. The whole was then covered with leaves and trash from the woods, three or four inches thick, then some heavier litter, such as drifted brush from low grounds, sedge, cornstalks and weeds, thrown on to prevent the wind taking off the leaves.

Here ended the tending, except where the trash was not thick enough to prevent weeds springing up, they were pulled out by hand.—The planting was done in the latter part of the Third month last, the product was 121½ bushels, being a fraction over 3¾ bushels to the square rod, or 607½ to the acre. The planting was from the stock I have had for several years past, and the product quite as fine as I ever saw from the mountains.

Thomas T. Hunt.

Springfield, Guilford Co., N. C.
Third mo. 1st, 1843.

ORCHARDS.

We hope those who are without them, will not permit another season to pass without supplying themselves with an abundance of young fruit trees. If its convenience and value are properly estimated, there is probably no acre on the farm that pays so well for the labor bestowed upon it, as the orchard. We are satisfied, and are prepared to satisfy others, that the climate and soil of Virginia are as well adapted to the growth of apples and peaches as any in the Union. We mentioned the fact last year that pippins raised in this State are so much more highly esteemed in this city than the northern apple, that they bring fifty cents in the barrel more in the market. We have just received from a friend in Goochland a present of a barrel of pippins, that in flavor and quality are equal to any we ever saw. And yet the old idea was, that a pippin was not fit to eat unless it came from New England. Peaches, too, as we have asserted over and over again, attain a flavor in this climate that is totally wanting in the large, fine looking, highly cultivated fruit of the North. Yet "with all the means and appliances to boot," we are in the general miserably supplied with this delicious and healthy gift of nature; whilst in the more ungenial region of the North, every fifty acres is furnished with its well selected, neatly trimmed, and highly cultivated orchard.

By the bye, talking about orchards, in the course of our peregrinations this fall, we fell in with a very curious work, entitled "Prime facts for the *Farmer*, *Fruit Grower* and the *Public*." It is made up of opinions and statements furnished Mr. M. R. Bartlett, the Editor, by Mr. JOHN FORMAN, of Western New York. Mr. Forman is represented as a practical farmer and most successful fruit grower. His management of his peach trees is to us entirely novel, and as it comes so strongly recommended by the author's reputation for success in his peaches particularly, at the risk of being a little prosy, we will give it in his own words.

The engraving represents his

RENOVATED PEACH TREE.

"The peach tree seed demands, invariably, *a dry, warm, and strong soil, free of stones, weeds, and grass*, and smally declining in some direction, so as to avoid standing pools of water.—From this ground, which should be located quite remote from all *old and sickly peach trees*, the weeds, &c. should be carefully dressed out two or three times during each season, and all cob-web nests, and the homes of insects, should be thoroughly brushed away. Any other course than this, may possibly save labor, but it inevitably leaves the infant tree exposed to incurable disease and early decay.

"In the next place, in order to preserve the nursery plant from the visitation of the *white grub-like worm* and all other unfriendly insects, the earth immediately about the root of each plant, must be effectually drenched with stale *chamber lye*, and this must be followed up faithfully during the months of August, September and October of each year of the seedling's nursery growth. The free application of this *lye* to the ground about the plant, has been found effectual in keeping every kind of noxious insect out of the way, and preserving the plant not only in a healthy state, but in a fair and thrifty condition for the orchard.

"Well tested experiments effectually show that dry, elevated, and rolling ground, is not only the most inviting, but the most safe and the most certain. And should the surface chance to be quite broken and quite rocky, these form no serious objections.

"Much of the success in the cultivation of this fruit, is generally supposed to depend upon the direction of the descent of the ground of the

peach orchard; but the point of declination, is not in fact of any great moment. Experience proves that the *north* and *west* pitch, will, in ordinary seasons, produce the greatest amount of fruit; while the *southern* and *eastern* pitch, bring the earliest and richest flavored fruit.

"*The training of a Peach Tree in a single stem, &c.* The evils arising from this mode of culture, may be all easily and effectually remedied by substituting the following course of cultivation, viz:

"1. In planting the young trees in the orchard, say about one year after the ingraft, care must be taken, in the first place, to *set them some ten or twelve feet apart;* this distance will admit a free team passage about the orchard. Then, in the next place, further care must be taken to *plant the roots of each seedling full eight inches lower in the earth than the depth at which it stood in the nursery.* This distance down places the roots quite out of the reach of the bug and the worm, and gives them a fair hold upon the earth and the nutriment which it furnishes.—Then, if it should so happen that the worm or other insect, bark the tree and bore it, and even kill it at the ground, new shoots will immediately spring up from the safely bedded root, strong and full of health, and thus keep the orchard stock in good condition.

"2. In the spring, next following the planting of the orchard, each tree must be cut off at the ground. Then, from the root or stump thus left in the earth, fresh sprouts will soon shoot up, as in the subjoined cut, and *these are to form the future peach tree.*

"The thrifty stems severed from the stump, may, if taken off at the swell of the *leaf bud*, be separated into *slips* of about ten or twelve inches in length, and *planted some eight or ten inches* deep in the earth, leaving simply a fair sprouting space above the surface. These slips, if the ground be rich, fine, compact, and kindly disposed, will also sprout and grow, forming roots downward, and shoots upward, and this too, as experience teaches, in six or eight cases, as an average, in every ten.

"4. The sprouts springing from the deeply grounded root, and forming the *peach tree*, are all held in an upright and family-like position, by the body of earth which surrounds them; and although the ground in which they stand may be extremely rich, and full of appropriate nourishment,—and the sap very profuse, yet, being divided among so many suckers, it affords to each but a moderate share of nutriment; and that share may be easily regulated to suit any quality of ground by increasing or diminishing the number of sprouts.

"One great object in this mode of culture, is to secure, *not a rapid, but a very moderate, not to say, slow growth of the tree, and at the same time, a sound and durable quality of timber, with a smooth and safe bark into which the rain and sleet will not penetrate, nor will the frost or post-worm find a ready entrance.*

"4. But should the *white grub*, in his rambles, or the *black bug*, in his flights, chance to reach one or two of these sprouts, or even all of them at a single visit, which in fact would be a very rare occurrence, and prey upon them, they would all die as a matter of course; but then the *root* is safe; it has felt neither the sting of the one nor the tooth of the other; and it will soon send up new and healthy shoots,—*an entire healthy and graceful peach tree.*

"Experience has proved all this, and it has also proved, that, in such cases, an excess of shoots will often spring up, and make a too minute division of the sap, thereby endangering the health of the whole family of sprouts; therefore, *these sprouts must be trimmed out and the number graduated to the condition of the soil.* In this trimming, however, some thought must be had as to the nature and state of the ground, its location, pitch, &c. In *poor land* some three or four shoots are enough, and six or eight in *rich soil.* Then, as to the relative position and promise of the plants,—division is one object, the preservation of the largest and most thrifty, is another, and both, and all demand the exercise of *judgment.* But let it be borne in mind, that this surplusage of shoots, let them come whence and when they may, *must be removed only at early trimming time.*

"These thrifty sprouts, whether from the root of the nursery tree, or from one killed by the grub, will begin to bear fruit the second or third year; and by the sixth or seventh year, they become extremely prolific and elegant. In this way, the stock of peach trees may be preserved in a perfectly healthy state, secure from all ordinary casualties, the late spring frosts excepted, for many years; ay, for whole generations, and rarely show the symptoms of the YELLOWS, as the sickly foliage is generally designated, or the decay of a root or a stem.

"It may here be observed that, in order to promote the *purity of the peach orchard*, and preserve the beauty and quantity of the fruit, the HOG should be allowed the free range of the whole ground, from early grass time up to the ripening of the choice peach; and when he is restrained from this range, all exposures of the roots of trees, to the ravages of insects, &c, should be carefully covered up, and the ground left somewhat rounding or rising rather than hollow; for standing water is a deadly foe to the peach tree."

Mr. Forman indignantly complains of the impositions practised by some of the northern nurserymen, and threatens, unless his general complaints produce a reformation, to give names

and places, with a startling statement of practices that are resorted to by some of these gentlemen.

We would take this occasion to say to all our friends within striking distance of Richmond, that our old friend, Mr. JOSEPH SINTON, is prepared to supply any orders for fruit trees of the very best kinds. We believe the most implicit faith may be placed in the integrity and honor of Mr. Sinton. He has been long tried, and as far as we know, his trees have given universal satisfaction.

MANUFACTURE OF MANURE.

If you have a family and keep a horse and cow—or cow only—you are able to manufacture, annually, one hundred cords of manure, which shall be worth to you or to purchasers, who will be glad to pay you the money for it, nine shillings, or even two dollars per cord.

Suppose your barn is near your house. Suppose, also, you dig and stone up a large vault under the barn, *into* which all the urine of the horse or cow, and their other excrements, shall be deposited. Let your sink drain also lead into this repository. On the way, between the sink and the barn, let the privy be placed, under which the soap suds and other washings from the sink shall be discharged, on a plank floor, into the depository under the barn. Let *that* be the common receptacle of the sink, privy and stable. Keep a horse or ox cart, or even a wheel barrow,—and between April and November, be sure to carry into that vault sods or other materials from the roads and fields, amounting to three cords per week, for the whole season. The next spring you will have at least, one hundred and fifty cords of manure, saturated with animal and human excrement, and the washings of the sink and wash rooms, which will be of the strongest and best kinds, and which will be *worth* every cent of two dollars per cord. In all human probability, the contents would bring you two hundred dollars. Is this not worth the pains? It may all be made so much clear gain, with little or no pecuniary cost to the housekeeper.—*W. A. Drew's Plough Boy.*

For the Southern Planter.

OVERSEERS.

Mr. Editor,—I am suffering under the most intolerable thraldom to which a poor devil was ever subjected, and unless you in your wisdom can afford me some relief, I must give up in despair. I am afflicted with an overseer, who is one of the most faithful, industrious, obstinate, hard-headed and conceited beings that ever walked on two legs. I am a young farmer, lately come into the possession of a large estate, and the fellow's knowledge of the practical and mechanical part of my business, is absolutely necessary to me; moreover, his hard-fisted honesty, notwithstanding his ignorance and obstinacy, prevents me from discharging him. In short, sir, I fear the old man of the sea was not seated more securely on the shoulders of poor Sinbad, than is this fellow on my premises. But whilst he continues here, I am the veriest slave on the plantation; for I have no will of my own. I am fond of reading agricultural works, and sometimes indulge in ideas of very extensive and judicious improvements; but to carry them out I am compelled to resort to the practical assistance of Mr. R., the gentleman before mentioned. Accordingly, in the blandest and most conciliating manner in the world, I suggest to him the advantage of trying some improved mode of culture that I have seen highly recommended in the Planter. He answers, "of course if I order him to do it he will try it, but he knows it will never do in the world;" and sure enough, it never does "do." If at considerable pains and expense I procure some improved implement, which has been brought to my notice in my agricultural papers, no matter how admirably it may work for a day or two, whilst I am superintending it, in a little time I find it laid up in the barn, and I am briefly informed that it is "out of order and of no manner of account." Thus, notwithstanding my great desire to adopt and profit by the improvements of the age, notwithstanding I feel confident that by improved culture the product of my farm could be doubled, here I am, working exactly as my great grandfather did before me, continuing the same unscientific and destructive system that my venerable ancestor pursued. Is not this intolerable? Yet, what am I to do? My neighbors tell me if I dismiss my present tyrant, I shall probably get one in his place with more conceit and less honesty. Will you, Mr. Editor, assist me with your advice in this dilemma, and oblige

Your obedient servant, T. S.

We feel for our friend, and will not withhold from him the consolation and assistance our poor advice can afford. In the first place then, we say to him, discharge your overseer and attend to your business yourself. With your superior intelligence and information, you can soon become infinitely better skilled in what you call the "practical and mechanical part of your profession," than the prejudiced, ignorant booby you have described, ever could be. If you must have a superintendent, take care to be superior to him in every department of your business,

and let that superiority be recognised and acknowledged.

Various causes have been assigned for the supposed retarded state of agriculture in the South, but in our opinion, nothing militates more against the progress of improvement amongst us, than the universal system of employing overseers. We know it is much the fashion, especially with the demagogue who wants their votes, to laud this class of men; nor do we mean to say that there are not many honorable, liberal, intelligent individuals among them; but our observation has lead us to the conclusion, that, for the most part, they are ignorant, prejudiced, and obstinate, in the extreme; and we have no doubt that the picture of his own situation drawn by our friend T. S., although perhaps a little highly colored, is a faithful portraiture of the influence exercised by these men upon southern agriculture.

Very large proprietors can afford to employ men of skill and intelligence to superintend their estates, but we respectfully ask if the small farmer, of three or four hundred acres, would not do better by attending to his own business than by employing another to do it for him? Remember the old maxim, "if you want your business done, employ another; if you want it *well* done, do it yourself."

The *Pictorial Times* and *Illustrated London News*, containing descriptions of the Fair of the Royal Agricultural Society at Derby, were sent from this office to several of our exchange papers, and we suspect the Southern Planter and the South Western Farmer are indebted to us for the papers they have acknowledged from another source. Certain it is, we sent them copies of the papers mentioned.—*Cultivator.*

The only copy of these papers that we received were marked as coming from the office of the Agriculturist. But we are as much indebted to our friends of the "Cultivator" as if their intended kindness had been received.

EFFECTS OF DROUGHT PREVENTED BY DEEP TILLAGE.

To the Editor of the Southern Planter:

Dear Sir,—I made an experiment on a small scale during the past season, the object of which was to satisfy myself as to the advantage or disadvantage of close planting and deep tillage of corn with reference to its ability to withstand the effects of a very dry season. The result as to the first branch of the experiment was unsatisfactory, while that of the second branch was a clear demonstration to my mind of the great utility of deep tillage, or subsoil ploughing where the soil will not admit of a deep upturning, in enabling the corn to resist the effect of drought. I selected a square in my garden through which a trench had been opened the previous season two feet deep and about eight feet wide. This trench was filled up and levelled with the common surface, and after manuring the whole broadcast with litter from the farm-pen, it was prepared and planted at the earliest period the season (a late one) would permit, at the distance of three feet each way, two rows running through the length of the trench, and the whole was thinned to two stalks in the hill. It grew off finely and was advanced to the critical stage of earing when the late drought occurred. From this the corn suffered great injury in general, but the part which grew over the celery trench retained its verdure and freshness during the prevalence of the drought, whilst nearly every blade of the remaining part of the square was frequently seen to be in a twist.

I submit the facts of this experiment—the public may draw their own inferences.

Yours respectfully,

CH. B. WILLIAMS.

PEAS AS AN IMPROVER.

We have been requested by a subscriber to obtain some information for him upon the subject of using peas to improve poor land. In the absence of any original information we make the following extracts from a communication lately made by MR. EDMUND RUFFIN to an agricultural society in South Carolina:

"The almost universal mode of raising the pea crop in South Carolina is by planting among corn. The length of the summer permits this planting to be done after the corn is well advanced in growth, and for the peas to have time to perfect their growth after that of the corn has ceased. Universal experience seems to have confirmed the value and profit of the pea crop thus made. But this mode, however advantageous, seems to me of far less benefit, than either of several other modes. Of one of these I have myself had large and satisfactory experience, under a less favorable climate—and others I have but just seen in this neighborhood, or elsewhere in this State.

"Whatever may be the amount of product, or of profit, from raising peas among corn, as a secondary cultivated crop, it is attended with much trouble in the planting and separate tillage.

"Peas (like red clover, which is also a plant of the pea tribe,) draw sustenance very largely from the atmosphere, by their system of broad leaves, compared to what they draw from the soil. Hence such plants take less from the land, and return more to it, than any others, and, therefore, are the best of manuring or meliorating crops, to be alternated with the more exhausting grain, and tillage crops. In this respect, red clover has stood unrivalled, because in the more northern and improved lands, where its admirable manuring and cleansing qualities have been fully experienced, peas cannot be as well raised. From some trials made here, there is good reason to hope that red clover may be raised to great advantage, even without lime, the application of which would ensure its perfect success. But, even if this were not so, the pea crop sown broadcast is scarcely less valuable than clover as a manuring crop, and superior to it in several other respects. And the great ground of recommendation of the pea crop, is that it may be introduced after either of several different grain crops, and to fill longer or shorter intervals of time, which would otherwise be fruitless for melioration, or serve to fill the land with foul weeds and depredating insects. In this manner, peas may be advantageously used to improve and add to any scheme of rotation of crops—lessening the exhausting operation and destructive effects of the worst rotations—or making one really improving and excellent, which without the addition of peas would be more exhausting than meliorating.

"The principal experience which I have had of peas as a manuring and cleansing crop in my own practice, was the sowing the field broadcast, upon a good and clean ploughing, and harrowing in the seed, (of the cow pea, or some other variety producing much vine and leaf,) about one and a half bushels to the acre. The crop at or near maturity of the more forward pods, should be well ploughed under about a month before the time to sow wheat. The wheat should be sown on the same furrow, and covered by the harrow. This is an admirable preparation, serving by the thickly covering and shading and smothering and subsequently killing of the peas, well to cleanse and also to manure the land, and to produce a much better crop of wheat than can possibly follow corn, cotton, and still more, wheat itself or other broadcast grain. The sole objection to this preparation is the cost of the ploughing for the pea seeding; and this perhaps may be often saved by a new practice of which I have recently learned something elsewhere. The black pea, and also a dark red pea, will lie upon the ground, or remain covered therein, through winter without rotting, and will germinate and grow in the spring. Availing of this property, these peas have been successfully sown both late in autumn (or early part of winter,) with wheat, and in spring with oats. The peas grow but little until the grain crop is removed, and then grow rapidly, and soon form a good cover. It is not to be supposed that this plan will always succeed. But it has done well, on a small scale of operations, for three years as conducted by Wm. R. Davis, Esq. in Fairfield, and for six years on a larger scale, by Major J. Littlejohn in Union.

"If it be not desired to use the broadcast pea crop to prepare for and measure for wheat—or if it be preferred to save the crop for hay—then the latter may be done, as I had the benefit of seeing but a few days ago, on the neighboring plantation of one of your Society, the Hon. J. C. Calhoun. The crop of peas was mowed by the scythe; and after laying a few hours in the sun, and without being turned, the vines were put up in high and narrow cocks around a stake five or six feet high, to stand until cured enough to be stored in the house. This plan (which, by the way, with smaller cocks, is the best mode I have ever known of curing all kinds of grass for hay)—saves the trouble of turning the hay with forks, and the loss by such turning causing the dropping the leaves and shedding the ripe peas, as well as too much sunning the hay.—The provender thus saved is excellent, and the land is left clean for any succeeding crop. In this case, the cow pea was the variety used, and the sowing was in May, at the rate of two and a half bushels to the acre.

"A still more admirable plan of raising peas I saw on part of the same plantation. The seed had been sown broadcast (one bushel to the acre) in the corn land at the last ploughing, which was in July. The crop of corn we suppose may be twenty-five bushels to the acre; and the peas (as seen on the 26th of September) formed a thick and rank cover of the whole ground."

PLOUGHS.

We have been in the habit of considering a guage wheel to a plough an appendage of very doubtful utility, and we believe it has been almost universally discarded in the few instanees in which it has been introduced amongst our old fashioned Virginia farmers; although the truth is, we believe three-fourths of them never saw a plough with a wheel to it, and many of them have very little idea to what part it is attached. Yet we find the following remarks in the report of the committee who superintended the ploughing match at the grand State fair at Rochester, New York:

"Many of them came unprovided with a

guage wheel, and the difference of draft was so great, with or without a wheel, that those who had not a wheel, borrowed one before they would go through with a trial. Your committee think this point settled in the minds of every one who saw this trial, that a wheel is an indispensable accompaniment to a good plough in sward land, or indeed in almost any other."

For the Southern Planter.

PLASTER OF PARIS.—CHARCOAL.

Mr. Editor,—A distinguished politician of the West adopted as his motto, "Clay first, Clay last, and Clay all the time." My motto as a farmer is, Manure first, Manure last, and Manure all the time. It is a well known fact, that most of the farmers east of Richmond, who have been induced to sow plaster upon their fields, have long since given up the use of it as worthless, and upon some minds a strong prejudice exists against its use, not having seen, as they say, the least beneficial results from it.—Plaster is a very insoluble substance, requiring nearly five hundred parts of water to dissolve one of plaster. When it is sown upon the soil, therefore, and acts beneficially, it is owing to its chemical action. Unless it comes in contact with some substance in the soil capable of decomposing it, it will remain unchanged and inert, and no good result can be expected to follow its use. Professor Liebig's theory, that plaster decomposes the ammonia that falls in rain water, I am disposed to call in question, for the following reason.* It is rational to conclude that the same quantity of ammonia, (which he says is always present in rain water) would be brought down in one place as in another, and the beneficial effects of plaster would be (according to his theory) everywhere alike manifest. This we know from experience is not the case. But I must be permitted to say that where the use of plaster comes to be properly understood, it is, in my judgment, destined to hold a high rank among the farmers of the East, as it now does among the farmers of the West. To all I would say, use plaster liberally in constructing your manure and compost heaps; never allow either to ferment without a proper admixture of ground plaster in the heap. In this way the plaster is decomposed, and two compounds are formed, sulphate of ammonia and carbonate of lime, and the volatile portion of the manure heap will be retained for the use of crops. And here I would respectfully urge upon my brother farmers to adopt some plan without delay to save the liquid manure of their animals. The ready wit of every farmer will suggest the manner of doing it. Some might be aided by reference to an article of mine in your paper, January number for 1842. If the solid and liquid excrements cannot be saved together in a well constructed reservoir, water tight, and protected from the weather, the solid may be fermented by pouring the liquid upon it, but don't forget the PLASTER. After fermentation especially, in all cases, it should be protected from the weather, or much of the value will be lost from drenching rains. I have nearly filled two sides of my sheet, but I must say something about

CHARCOAL.

Professor Liebig has said, charcoal *previously heated to redness*, will absorb ninety times its volume of ammoniacal gas. I have no doubt of it. Mark the words in italics, "previously heated to redness." Charcoal has also great affinity for carbonic acid, but it has a greater affinity for water than for any of the gases; when filled with either carbonic acid or ammoniacal gas, upon being made wet this gas will be liberated and the pores of the charcoal become filled with water. Now suppose from exposure to the atmosphere the pores of the charcoal should be filled with carbonic acid. Then place it over a stream of ammoniacal gas, the ammonia could not enter, because it could not displace the carbonic acid; but suppose the farmer should use charcoal in his manure heaps instead of plaster, and it should be in a condition to absorb the ammoniacal gas, the character of the ammonia is still the same; charcoal does not deprive it of its volatility; consequently, the moment it is disengaged by the charcoal becoming wet, there is danger of a loss of all the ammonia.

I have made the foregoing plain remarks in regard to charcoal, because I perceive from the agricultural periodicals it is becoming very fashionable, and I fear many fatal mistakes will be the result.*

In conclusion, I must again say to all, use ground plaster liberally in your stables, cowsheds, manure and compost heaps, and the result cannot be doubtful.

I remain truly, yours,

GEO. WOODFIN.

SALTING HORSES.

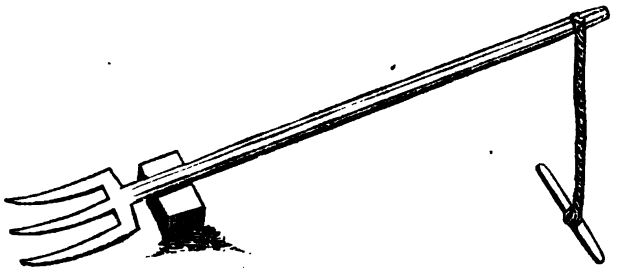
A curious fact is mentioned in Parker's Treaties on Salt. "A person who kept sixteen farming

* The fact that plaster and carbonate of ammonia mutually decompose each other when brought into contact at common temperatures I do not for a moment call in question. The decomposition, however, is slow. The quantity of plaster is so small generally when sown upon the surface, and the action upon some soils so different from that of others I cannot subscribe to his theory about rain water and plaster.

* Charcoal is most usually recommended to be used about manure heaps to retain the ammonia,—I would not rely upon it. Will Mr. Drummond give us the practical results of his experiment with charcoal as a manure?

horses, made the following experiment with seven of them which had been accustomed to eat salt with their food. Lumps of rock salt were laid in their mangers, and these lumps, previously weighed, were examined weekly, to ascertain what quantity had been consumed, and it was repeatedly found that whenever these horses were fed on hay and corn, they consumed only about 2¼ or 3 ounces per day; but that when they were fed with new hay, they took six ounces per day." This should convince us of the expediency of permitting our cattle the free use of salt at all times; and it cannot be given in so convenient a form as rock salt, it being much more palatable than the other article in a refined state, and by far cheaper. A good lump should always be kept in a box by the side of the animal, without fear that it will be taken to excess.—*Selected.*

A GRUBBING FORK.



We present our readers with an engraving and description (taken from Thaer's Principles of Agriculture) of an implement that will, we think, be found very useful in the tedious business of *grubbing:*

"Sometimes for the purpose of extirpating shrubs a lever is used, armed at one of its extremities with a very strong trident of iron, the prongs of which are usually 20 inches long.

"As they must be able to endure a great strain, the part of the instrument which joins the socket and the socket itself should be very strong. Into this socket a pole is introduced which serves for a lever, which should be stout, of solid wood, of ash if possible, and 15 or 20 feet long. To the extremity of the handle a cord is attached 8 or 10 feet long, with a cross bar, by means of which several men can exert their strength at once upon the lever. After the strongest lateral roots have been cut, the trident is thrust under the stock or stump, in an inclined position, then a block is placed under the handle or lever, which is placed so near the stump as to raise the extremity of the handle 10 or 12 feet, then by means of the cross-bar attached to the cord the workmen bring down the upper part of the handle till the roots yield to their efforts. By the aid of this instrument, simple as it is, astonishing things can be effected, and when it is insufficient more complicated machines will run great risk of being broken."

For the Southern Planter.

COMMENTS.

It will be noticed that I have ceased to comment on the contents of the Southern Planter. This has been caused by the complaints of one who says I treated him rudely, or words to this amount. It should be remembered that in this manner of writing one has to travel an unfrequented path over rocks, hills and valleys, and through mud and water. In the case above alluded to I unfortunately got into the mud, and in the headlong efforts to extricate myself, I bespattered an unknown friend, of which he heartily complains. Now, behold the garments of my friend have been purified by the communication which my comments elicited, and in which he complains of me; but I am yet bemired and silent, and determined to remain so unless the gentleman or the public shall see fit to lift me once more to a perpendicular.

INVESTIGATOR.

We regret the determination of our correspondent. We are aware of the peculiar delicacy of the position he assumed as a commentator upon the contents of the Planter. There is no species of communication more useful than a fair, candid and *gentlemanly* review of the opinion of others; for it is only by a free and liberal discussion of points on which we differ, that we can expect to arrive at the truth. At the same

time, there is nothing more objectionable in itself, or more calculated to restrain the communications of others, than an uncourteous, carping critique upon every thing that appears. We know "Investigator" to be a sound, practical, and successful farmer, and we hope still to have the benefit of his experience in the shape of "comments," always presuming that they will be marked by that kind regard for the feelings of others, which we know to be characteristic of the individual.

For the Southern Planter.

REPLY TO R. R.

Mr. Editor,—In reply to the communication over the signature of "R. R." on "Overseers' Wages," that appeared in your last number, I would say that, in consequence of bad health I have been unable to redeem the promise made in the May number of 1841, over the signature of T. I. P. that in a future communication I would undertake to show more fully "the bad results of giving an overseer an interest in the crop," and am now indebted to the assistance of "*un copiste*" in sending you this; and instead of having recanted my previous views and opinions concerning the bad practice of giving overseers an interest in the crop, time has only served to confirm me in them.

The practice of giving overseers a part of the crop was a custom that prevailed thirty years ago, and the errors and consequences of which the improvements of agriculture have tended greatly to expose; and there are now found comparatively few that carry out this system.

The late Dr. William Meriweather, of this county, the most scientific and practical farmer of his day, and who was half a century before his cotemporaries in farming, was never known to give an overseer a part of his crop. The conflicting interest of one year with the gradual improvements of the farm for subsequent years, is evident; and a conscientious employer would find it at once in direct opposition to the interest of the overseer to be engaged in improvements in which he would have no interest.

I will conclude with saying that I deem the practice altogether inconsistent with any thing like progressive improvement on a farm; and as *you* have so ably sustained my views on this subject, I leave you in future to answer any thing that may be said upon it.

Yours, &c. T. I. P.

Amelia, Nov. 1, 1843.

P. S.—I would state that I have the promise of being put in the possession of the agricultural diary of the distinguished farmer mentioned, (Dr. Meriweather) and will send you, if my health permits, some extracts from it from time to time. His fame as a farmer was known all over Virginia. T. I. P.

We have often heard of Dr. Meriweather and shall be much pleased to receive the extracts from his diary.

To the Editors of the Louisville Journal:

Gentlemen,—Having noticed in your paper a call on the farmers to send you their experience of this year in the different branches of farming and of the improvement of the soil, I will proceed to give you mine in the raising and ploughing under of broadcast corn. We had a field of thirty-seven acres which had previously and the year before been cultivated in corn, and the soil of which required renovating; and, believing nothing could be sown which would more speedily accomplish the end proposed than broadcast corn, I proceeded accordingly. The field, previously to being sown, had not been broken up and the old stalks still remained upon the ground.

About the latter part of April I commenced sowing. Upon thirty acres I sowed two bushels of corn per acre, and upon the remaining seven, three bushels per acre, and ploughed the whole under, old stalks and all, two inches deep.

It came up and all grew equally until about two feet high, when a marked difference began to present itself, and at the age of maturity that which was sown thick had scarce reached five feet high, whilst the other had attained the height of seven or eight feet. Hence we see, for two reasons, a decided advantage in favor of thin sowing: first, because it requires less corn; and, secondly, your stalks will grow both larger and taller, and from my own observation I may add that less than two bushels per acre would perhaps be advantageous. And now comes the ploughing under. Finding it impossible, with the aid of a log-chain reaching from the beam of the plough to the end of the double-tree, to turn it under as well as desired, I determined to seek some other mode, and for that purpose knew of nothing better than the roller, which I accordingly procured, and commenced rolling it down by lands of suitable width for the plough to follow. The roller is of such weight that when drawn by two horses it will mash the stalks down flat with the ground, and I can unhesitatingly say that stalks, even ten or twelve feet high, may in this way be completely turned under to the depth of four inches without injury to the horses.

Were my only object the rapid improvement of the soil, within the shortest space of time, I would not seek further or better means than first sowing down thick with rye, which I would plough under just before the time of ripening,

to prevent its seeding the ground, and upon which I would sow one bushel and a half of corn per acre; thus, in the same season, ploughing under a heavy coat of rye and corn, which, in the short space of twelve months, will equal if not surpass any benefit which can be derived from clover in two years.

Though last, not least, another important advantage to be taken into consideration is, that by this double process your land is less exposed to the deteriorating effect of the sun's rays, when a rye crop is ploughed under in June and corn sown broadcast, than when with corn alone you would be compelled if sown early to plough under in August, and consequently your land would be left exposed to the scorching influence of an autumnal sun.

October 12, 1843.

BOMMER'S MANURE METHOD PUT IN PRACTICE.

We extract the following certificate of the value of the manure made by Bommer's process from the last number of the Cultivator. We have in our own possession the most satisfactory testimonials of its efficiency in producing speedy decomposition, and of the *apparent* value of the manure. But nobody hereabouts has yet had an opportunity of testing its effects upon a crop; although no one who has seen the manure after it is made, seems to have any doubts upon this point. As far as our information and experience go, the time required to produce perfect decomposition is rather underrated. Of course different materials will be longer or shorter in rotting, but we rather think that the average will require from four to six weeks. But our information is drawn from experiments made during the last summer, when the process was undoubtedly much retarded by the excessive rains for which the season was so remarkable.

"*Messrs. Gaylord & Tucker*,—Being a subscriber and constant reader of your valuable agricultural publication, I frequently find there, articles on 'Bommer's Method of Making Manure.' As these articles are chiefly from the pens of agriculturists who have followed this method with entire success, it affords me unfeigned pleasure to be able, on my own behalf, also to bear testimony to the value of this method, and through the medium of your paper, to make the results of my experiments and operations known to my fellow-citizens. This I do, both for the sake of bringing before the public the great advantages derived from using the method spoken of, and the benefits insured me by its application, and at the same time in order to render a deserved tribute to the truth.

"On purchasing Bommer's method last spring, I immediately prepared a heap in the presence of a few neighbors. I followed strictly the directions laid down in Bommer's book.—After the lapse of a fortnight, the heap was opened in the presence of a number of farmers, and our astonishment cannot be conceived on seeing the metamorphosis which had taken place, as we found all those weedy and straminеous materials of which the heap had been constructed, reduced to rich black manure, having an ammoniac smell, much more pungent than the best stable manure. Beholding so surprising a result, the farmers present formed themselves into a public meeting, and in that capacity nominated a committee from their midst, who were charged with the preparation of a report of what we had seen, to be sent to the agricultural press.

"I ploughed in this manure into one-half of a field intended for potatoes, and in order to institute a comparison of effects, I put the same quantity of my best stable manure into the other half of the field. The effect on the soil was very nearly the same with both these kinds of manure; but the vegetation on that part of the field which had been furnished with Bommer's manure, was more luxurious and the foliage of a deeper verdure, which I attribute to the richness of the saline matter which it contains, and which alone preserved the humidity of the soil during the severe drought of this last season. It is proper to remark also, that in the composition of the 'Bommer manure,' I employed simply such doses of the ingredients as were absolutely necessary to insure success in the operation of making it, and if I had increased these quantities, there is not the least doubt that the result of the Bommer manure would have been very far superior to that of any horse manure.

"Perfectly satisfied with my experiment and its results, I have put up fixtures near my barnyard for the purpose of preparing large quantities of this manure; and within the last two months I have made three heaps, which have yielded me between 200 and 300 loads of excellent manure. The last heap was composed entirely of 100 loads of sedge grass, nearly dry, with which I intermixed 40 loads of swampy matter, such as exists on my farm. All my outlay in purchasing ingredients to form the lye for this last heap, amounted to between $20 and $30, and in disbursing this trifling sum, I have made a heap of manure, which I would not dispose of for $250.

"I shall prepare other heaps of manure before the winter sets in, and those who may be desirous to see me at work and to assure themselves of the truth of what I have said, need

only call at my farm, and judge for themselves. The benefits which I derive from using this method are not inconsiderable. Before becoming acquainted with it, I purchased every year from three to five hundred dollars worth of manure, which I needed over and above that of my own farm-yard, for the two hundred acres which I have. Now I do not purchase one penny's worth, and I can make double the quantity if I choose. I have the advantage of producing my manure in the sowing and planting season. I can make it more or less strong, more or less fermented, so as to suit the soil and the kind of crop for which I want it; I spread and plough it in while it is perfectly fresh, and consequently in all its strength. These are some of the results experienced by me in using Bommer's method of manuring land.

JERRIT KOUWENHOVEN.

Flatlands, L. I., Sept. 15, 1843."

For the Southern Planter.

AGRICULTURAL APHORISMS.

NO. VII.

As the stalk of corn in the field, so the young man; both must be cultivated or their fruit will be chaffy.

Some men subsist by labor of the body, some by labor of the mind; a combination of both is important to success.

Some men write without thinking, some think without writing; the one is willing and not able, the other able and not willing.

There is no profit without capital. The merchant's capital is his money; the farmer's capital is his manure bank.

Winter time is hard by, and I venture to admonish every farmer to count his cattle, and then his hay stacks, and if the one shall exceed the other, then either sell, eat, give away, or kill the surplus to keep them from dying.

Agriculture is favorable to morals, to health, and to wealth.

Mankind might do without physicians, if they would observe the laws of health; without lawyers, if they would keep their tempers; without soldiers, if they would observe the laws of Christianity; and perhaps without preachers if each would take care of his own conscience; but there is no living without farmers.

ARGUS.

Amherst, October, 1843.

FODDER.

We observe that Mr. RUFFIN, in a communication to an agricultural society of South Carolina, expresses the opinion, that more injury results to the grain from pulling the fodder and cutting the tops of corn than is counterbalanced by the value of these substances as articles of food; so that if by being permitted to remain they were entirely lost, and the labor of gathering were estimated at nothing, it would be better to leave them on the stalk. Some late experiments that he has witnessed in the manufacture of sugar from cornstalks in different stages of their growth, have satisfied him that the grain uses up and requires all the saccharine matter of the stalk and leaves, and that as long as there is a spark of vitality in these, they are ministering to the growth and perfection of the seed.

For our own part, we doubt not that the growth of the grain is often checked and that *shrivelling* is often produced by pulling the leaves and topping the plant too early. How the account will stand between the gain of fodder and the shrinkage of the grain, we are not prepared to say. But admit that the superior character of the fodder secured by early pulling will not compensate for the injury to the grain; still, we think even after the leaves have performed all their functions and the plant has ceased to grow, that the tops and leaves may be gathered to great advantage. The saccharine matter, even, has not been all exhausted as chemical analysis proves, and other nutritive properties undoubtedly remain. In the North even the lower part of the stock is recommended as affording excellent food, and fully justifying the labor and expense of gathering and passing through the cutting box.

From the Southern Cultivator.

ON CLEARING LAND.

Messrs. Editors,—Permit me, through your paper, to communicate some of my ideas to my brother farmers on clearing land—I might say experience. The plan I have tried successfully for several years, is this:—I grub, cut the fire-wood, and rail timber, kill the timber left standing, and split the rails in the course of the fall and winter; heaping no more brush than will give me sufficient pass-way to haul the fire-wood out as I need it. In that condition I let it lay one year, with the exception of shrubbing the ensuing summer, and the spring following I have a fine piece of mellow new ground, ready for inclosing and cleaning up, the standing timber all dead, the fibrous roots, the leaves and trash all rotten, and the land very often producing a double crop the first year. Nor does it stop there; for I believe the good effects may

be seen for six or eight years after. Need I tell any rational man that the first year's rest is worth more in enriching the soil, when the brush and timber are lying on it, than any two or three years after it has been in cultivation? Let me invite them to look at our wood-lands, with the growth so dense that you can scarcely ride through it, the face of the earth covered two or three inches deep with leaves, and ask them to determine whether, if all be cut and burnt off the same winter, as is usually done, their land is not greatly impoverished? Need I argue with my brother farmers so plain a case? I think not; for if they will reflect one moment on the two plans, I believe they will try mine, and I venture to say if once tried they will pursue it in future.

My next clearing I expect to let lay two years, with all cut and killed on it but the rail timber, and the second winter I will cut and split the rails, leaving all on the ground one year, and I expect by doing so my land will be worth more than double the same lands cleared in the usual way.

And now, Messrs. Editors, in looking over your paper, I am surprised to find so few contributing towards supporting it with their practical modes of farming. We want Georgia farming—surely no place needs improving more than middle Georgia—and I do hope that there is intelligence and patriotism enough in middle Georgia to make your paper appear what every good citizen should wish it to be.

ROBERT CALDWELL.

For the Southern Planter.

GALLS AND GULLIES.

Mr. Editor,—From the wretched system of cultivation in many parts of Virginia, the farms present an uncomely aspect from innumerable galls and gullies. Experience has taught me that these may be stopped without any very great labor. Every one in the field intended for corn, ought to be stopped. It is the more necessary, because observation will soon teach one that when the hill sides are deeply ploughed and kept well cultivated, that but little superfluous water passes down the gullies; and hence there is less danger of their washing out after having been filled up. The best time for the operation is as soon as the land thaws after a severe freeze; or during some wet time when it would not be proper to work in the fields. I commence by running a two-horse plough up one side and down the other, so as to throw the dirt into the gully. The horse next the gully should be coupled to the other by a long cord, and that to the trace of the other below the attachment of the backband. This precaution will be found necessary, so that if he fall in he may not pull his fellow after him. The gully is a convenient deposit for any thing that may lie in the way, such as logs, stumps, rocks, brush, &c., but they are by no means essential for the success of the operation.

It is generally necessary to have some hands with hoes, mattocs, &c. as there are many places that the plough cannot reach in consequence of the zigzag form of the gully, until some digging be done. Also many gullies have forks, or prongs, so that the ploughing cannot be done until a crossing place be made near the main gully. I am in favor of continuing the operation only until the place becomes such that a single-horse plough can cross with ease, and then leave the balance to the gradual washings of after years. When I have arrived at this stage I cover the whole place well with manure and sow small grain, (or peas,) and turn in the manure and small grain together, and then sow a mixture of different kinds of grass seeds with plaster of Paris, and cover the whole with straw. In a few days the grain will put up through the straw and hold it so closely to the earth that the most washing rain will not remove it. I prefer a mixture of red clover, herdsgrass and greensward seeds.

In the subsequent cultivation of the field the gullies should remain untouched by the plough or hoe; and in a little time the grass will form such a sward as to catch a sufficiency of dirt, during the washing of rains, to render the original gully nearly level.

Those who have not tried this plan may be incredulous; but such as doubt, may examine my farm and see for themselves, that gullies thus treated, have seldom been injured by washing rains. It is often the case that less time will be required to stop a gully than would be lost in turning the plough during the cultivation of the crop.

Every farmer ought to get clear of his gullies in four or five years, according to the number of shifts he may have on his farm.

I can say but little of the efficacy of hill side ditches to prevent gullies from washing out, but do not doubt their usefulness. I should have tried them if my professional engagements would have permitted me.

If the foregoing should not benefit any one, it may serve to elicit information from some person more competent to instruct.

R. D. PALMER.

October 28, 1843.

WOUNDS ON HORSES.

Take one-quarter of a pound of saltpetre, half a pint of spirits of turpentine—put them together in a bottle, and shake up before using.—Apply to the wound with a feather three times a day.—*Central New York Farmer.*